

JPRS 72066

18 October 1978

U S S R

TRANSLATIONS ON USSR MILITARY AFFAIRS

No. 1387

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BIBLIOGRAPHIC DATA SHEET		1. Report No. JPRS 72066	2.	3. Recipient's Accession No.	
4. Title and Subtitle TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1387				5. Report Date 18 October 1978	
7. Author(s)				6.	
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201				8. Performing Organization Rept. No.	
12. Sponsoring Organization Name and Address As above				10. Project/Task/Work Unit No.	
				11. Contract/Grant No.	
15. Supplementary Notes				13. Type of Report & Period Covered	
				14.	
16. Abstracts The report contains information on the Soviet military and civil defense establishments, leadership, doctrine, policy, planning, political affairs, organization, and equipment.					
17. Key Words and Document Analysis. 17a. Descriptors USSR Military Organizations Military Facilities Military Personnel					
17b. Identifiers/Open-Ended Terms					
17c. COSATI Field/Group 15C					
18. Availability Statement Unlimited Availability Sold by NTIS Springfield, Virginia 22151				19. Security Class (This Report) UNCLASSIFIED	
				20. Security Class (This Page) UNCLASSIFIED	
				21. No. of Pages 96	
				22. Price	

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NEED FOR EFFECTIVE FIELD TRAINING EXERCISES STRESSED

Moscow KRASNAYA ZVEZDA in Russian 2 Jul 78 p 1

[Editorial "High Effectiveness for Each Exercise"]

[Text] The words have already become a catch-phrase: study is the school of courage and mastery. They communicate well the immense role that exercises, flights and marches play in the life of troops and the responsibility with which personnel approach participation in them. Exercises enable the approximation of the learning process to the maximum extent to real combat conditions, and thereby implementation of one of the basic principles of combat training--to study what is needed in war. This is evident in an especially graphic way now, during the height of summer combat training, replete with exercises in the field, flights and naval cruises. It is here, on the training fields and ranges, in the air and on the expanses of the seas, that real masters of military science, first-class specialists, make their appearance and improve themselves, where their combat character is forged.

A genuine school of courage and mastery, for example, has been the recent tactical training with combat fire for all personnel of the tank battalion commanded by Captain Yu. Zayets. Officers, praporshchiki, sergeants, soldiers--military personnel of all specialties acted during it with full concentration of energies. High dynamism, rapidity, decisiveness, abrupt changes in the situation, a broad sweep of action--all the characteristics of modern combat were graphically portrayed in this exercise. Its success was due to a profound thinking through of the plan and to the leader's striving to create a truly complex situation encouraging the soldiers to act with initiative, apply military cunning and employ equipment and arms to the fullest. The exercise's effectiveness was to a great extent aided by purposeful Party and political work and by well organized competition on tasks and norms.

This example once more affirms conclusively the immutable truth that the more complex the situation is during training and the closer it is to real combat conditions, the more effective the exercise is. The dynamic development of events, the solution of problems arising suddenly, the overcoming

of the opposition of a strong and active "opponent" must be features of the exercise. Each exercise should develop in soldiers a combat activeness and the striving to carry out combat actions decisively, making skillful use of every capability of arms and combat equipment to solve the task, and subordinating every mental and physical effort to this.

It is during exercises that the commander's mastery as an organizer of combat and his ability to control subunits and set up interaction is sharpened. Clarity and reliability of control is the decisive condition of success in battle. Each exercise must be truly instructive in this sense and develop and improve this aspect of the commander's art. It is important that officers in charge strive not to watch over the leaders, but to stimulate their independence and initiative, and further in every way the development in them of tactical-operations thinking, a creative approach to solving problems that arise and a striving to apply varied and the most effective means of attaining the goals that have been set. A research approach and the working out of new modes of combat action should hold an ever greater place in exercises.

Unfortunately, not all the exercises, flights and marches conducted meet the continually rising requirements of modern combat yet. Some of them bear a simplistic character. Tactical training has not yet outlived the mold. Chief attention in exercises is sometimes given to the external aspect of actions; instances are encountered of underestimating such important components of combat organization and conduct as determining the means for executing combat tasks, working on-site to refine them, organizing of interaction and defeat of the opponent's weapons, combat and materials-equipment supply.

At times during exercises a tactical situation is created that does not demand of trainees a concentrated search for the most effective solutions, the display of initiative, creative thinking or resourcefulness. Training goals and the procedure for their development are not always thought through in detail. The combat actions of the two sides are sometimes performed without regard for errors committed by them in decisions and actions, and without due intensity. Such deficiencies, as KRASNAYA ZVEZDA has already related, were characteristic, for example, of a number of exercises in the tank regiment commanded by Guards Lieutenant Colonel V. Voloshchenko. This was one of the reasons for the fact that during the final check of the winter training period certain regimental subunits, placed in difficult positions to which they were not accustomed, displayed weak field training.

It is necessary to decisively halt simplification, to fight the tried and true and formalism. In evaluating exercises and their effectiveness, it is necessary to make a firm determination of whether they meet the requirements of modern combat and whether they facilitate the instilling in personnel of an indomitable aggressive thrust, high combat spirit and psychological qualities. The readiness of troops and naval forces should be perfected in exercises, flights and marches for actions having maximal intensity against

a strong, technically equipped, highly mobile opponent. The training of subunits, crews and teams in the art of defeating a target with the first shot or launch is also a task of first-rank importance.

The effectiveness of exercises greatly depends on how purposefully Party and political work is carried out during them. Its chief requirements are practicality, concreteness, a very close relation to the tasks being handled and the inclusion of all personnel. Creative use of experience from the front should be made in the organization of exercises and in the Party work conducted during them. The memoirs of Leonid Il'ich Brezhnev, "Malaya zemlya" ["The Small Earth"], are a very rich source of such experience. They teach commanders and political workers to see effective, substantive Party and political work as the major precondition for achieving victory; they teach flexible use of the whole arsenal of such forms and methods; and they teach reaching each fighting man.

The high combat intensity of exercises also ensues to a considerable extent from the efficiency of socialist competition. The practice is worthwhile of setting concrete obligations for each stage of the exercises, making an operational appraisal of the results and making wide use of moral forms of incentives for those who excel.

Each exercise, flight and march needs high effectiveness and combat intensity! Attaining this means ensuring further development of field, air and naval training of personnel, improvement of the combat readiness of the Soviet Armed Forces.

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CSO: 1801

STAFF WORK EFFECTIVENESS IN THE GSFG DISCUSSED

Moscow KRASNAYA ZVEZDA in Russian 2 Jul 78 p 2

[Article by Colonel General D. Grinkevich, Chief of Staff of the Group of Soviet Forces in Germany, in the column "Efficiency, Creative Approach": "The Depth of Staff Influence"]

[Text] The staffs of our units and formations are living these days at an intensified tempo. Summer combat training is at its height, and each staff officer, naturally, is taking every opportunity to be at the site of the main events, in the field where personnel skill is being forged and the fate of the socialist obligations taken on by military collectives in this anniversary year for the Soviet Armed Forces is being decided.

On the ranges, on the air fields and in the combat machinery yards--everywhere that intensified military work is in full swing you also meet today staff officers of the group of forces. Together with commanders, political workers, officers of unit and formation staffs and chiefs of arms and services, they are making their contribution to the overall struggle for a well organized, smooth-flowing, good-quality and effective training process.

The chief tool by which any staff influences the organization of the training process, as is known, is the plan of combat and political training. I think that I am not in error if I say that our staffs on the whole have coped rather well with the task of planning during the period of preparation for the current training year, as well as for the summer training period. The plans of military and political training developed by the staffs headed by Guards Major V. Rud' and Senior Lieutenant N. Balashov are particularly distinguished for their depth and well thought-out nature. A systematic consequence of this is the smooth-flowing and effective training process in subunits. The time devoted to study and training has been used productively, with maximal load.

But the plan, no matter how good it is, of course, cannot replace the organizational work of the staff officers located immediately in the subunits. Its importance is especially great now, when questions of combat coordination of small subunits are being worked out. Not to let slip from sight the

company, platoon, squad, team or crew--this is the very first task of the unit's staff if it seriously thinks through its influence in the forces. And here monitoring and verification of execution acquire particular importance.

Monitoring is one of the tried and tested means of bringing to life our plans and of carrying out the training program. We see its improvement as a sure means for heightening the level of all organization and inculcation work in the forces. The goal sought by any staff in this matter, as an organ of management in the commander's hands is, first of all, unconditional fulfillment of the plans laid out and of the socialist obligations; heightening the quality and effectiveness of the training process; strengthening the organization and responsibility in all sectors of the work, at all levels of management.

In order to judge the efficiency of the control carried out by any staff, it is sufficient to visit the subunits. How combat training tasks are solved, in what condition one finds internal order and discipline, how high the level of professional and methods training of officers is--in all these matters the face of the staff is reflected as in a mirror. The main object of monitoring has always been and remains those questions which define the level of subunits' combat preparedness.

Combat readiness is a broad concept. It includes many components. The ability to isolate the important point, to provide the commander with the opportunity to concentrate personnel efforts on the solution of the main problems, seems, in my view, the true sign of a staff's maturity, of its efficiency and of its ability to work in an up-to-date fashion. Moreover, the decisive condition for the success of a staff's activity has always been and remains strict observance of the Leninist principles of control, which have been proven by experience: Thus, an approach which is universal, systematic, mass in scale and public. This approach allows not only the taking of efficient steps to eliminate deficiencies, but also prevents deficiencies and heightens the responsibility of subunit commanders for the assigned task.

There is much to learn, for example, in the staff of the Berdichevskiy Guards Tank Regiment imeni Sukhe-Bator. The regimental staff headed by Guards Major V. Rud', working in close contact with the Deputy Regimental Commander and the Party committee, involves in the verification of execution a wide range of persons from the regimental level of management, including the chiefs of arms and services. This offers the staff an opportunity for profound and thorough analysis of the situation and the discovery and elimination, even during the course of verification, of deficiencies as well as the causes giving rise to them. The results of such concrete work are evident. The majority of subunits attained a marked rise in combat skill during the winter training and are fulfilling the plans of summer training with success. The regiment is confidently leading in competition with a neighboring unit and is making a significant contribution toward success

in the struggle of personnel for the title of leading unit. Skillful introduction of the experience of the Berdichevskiy tank troops will no doubt permit the whole unit to set new levels of combat mastery.

There are, however, instances of another sort as well. There are a good number of deficiencies, for example, in the work of the staff headed by Major B. Abdzhanov. The training process in the subunits here is not noted for its organization, and there is still a great waste of time. The staff knows of the deficiencies but takes a passive stance. The matter sometimes is reduced only to criticism of the guilty. Yet something else is required: a clear organization of training with the involvement in it of all chiefs of arms and services and a continuous concern for good material and technical supply for courses, particularly for normal operation of training-ground equipment.

Something must also be said about one reason for weak staff influence on combat training. They do not consider here that today it is impossible to achieve success in training and inculcation of personnel without delving deeply into questions of the organization and management of competition. A certain staff officer, for example, attends a training session, yet later, when reporting on his observations and conclusions, does not even remember the competition and does not analyze how the subunit executes its obligations or in what way the training session was notable in this regard. Matters of the organization of competition, including competition among staff officers, are almost untouched in service conferences and assemblies. Nor does the staff take an interest in how instructively the review is handled in companies and battalions.

The depth of staff influence on the quality and effectiveness of combat training depends ever more greatly on its participation in the organization of competition. The work conducted in the Group of Forces to implement the requirements of the Letter of the CPSU Central Committee, USSR Council of Ministers, AUCCTU and Komsomol, Central Committee on the Opening of Socialist Competition During 1978, in which many staffs of all ranks have taken active part alongside commanders and political organs, has enabled us to uncover and put to use a good number of reserves for further enhancing the effectiveness of competition. Staffs have played an important role in ensuring the strict monitoring of the implementation of obligations assumed in the formations and units of the Group of Forces, and are devoting more attention to matters of public announcement of competition and to moral incentives for the outstanding producers.

We see the activation of daily staff activity in summarizing and introducing leading experience as one of the major conditions for fuller utilization of reserves for strengthening combat readiness. "The time has come, comrades," said Comrade L. I. Brezhnev at the 23rd Komsomol Congress, "for us to learn to efficiently introduce leading experience and to carry every useful task to its conclusion." Our staffs do not at all have enough consistent concern for the efficient introduction of leading experience. To introduce something

means to achieve its active utilization and to impress on the consciousness of military personnel that the spread of leading experience flows totally from the direction of the Party toward quality and effectiveness of all work.

During the summer training we are paying serious attention to those units and subunits that did not fulfill their obligations during the course of winter training. We see our task in thoroughly understanding the reasons for the lag of each subunit and in helping them to achieve first-rate levels.

Further improvement in the style of staff work and the heightening of staff standards of performance, in the broadest sense of the concept, have been acquiring ever greater importance. The requirements on the staff officer, and above all on his ideological training and professional competence, have now grown immeasurably. The scope of knowledge and skills needed by him for work has now become so great that he is in no position to be a "jack-of-all-trades." A unique specialization of staff workers is becoming more and more widespread, in which each of them is responsible for a definite direction in the activity of the forces. This, of course, does not exclude the interchangeability of staff officers in the combat situation. The capability of a staff officer to replace a comrade when necessary or to combine the duties of several specialists without detriment to the task, is an important element in a high level of staff performance. At the same time this is a means of ensuring the functioning of control points and command centers when they are not fully staffed, an inevitable situation during combat.

Much depends on the chief of staff. His ability to distribute duties among subordinates while taking into account the features of the job and their individual peculiarities and to direct their activity to the solution of the main tasks of combat and political training, is a necessary condition for ensuring the effectiveness of staff work of any rank. The special training of officers, of course, is by far not the sole factor determining the level of staff performance. More and more modern means of managing troops are entering the staff's arsenal, and this, naturally, is related to the need to perfect the organization of labor in this field, and to raise its productivity.

At the same time, in some staffs the new means of management, everything that military science offers us in this field, is still being introduced slowly. An especially large amount of time is being wasted on the filling out of various documents, writing up all sorts of reports and other technical work which is not always related to an improvement in the quality of the training process. We must struggle more actively with such deficiencies.

It is better to work today than it was yesterday; tomorrow will be better than today--this is the battle slogan of the day. The Party relates its implementation directly to an improvement in the work style of our personnel and to an increase in discipline and organization. All this is the determining direction as well in the activity of staff that are called upon to deepen their influence on the life of units and subunits. As

stressed recently at a military council of our group of forces, raising the quality and effectiveness of staff work is the most important factor for success in the struggle for a better group of forces and a further rise in combat preparedness.

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CSO: 1801

COMMAND INDIFFERENCE TOWARD OFF-DUTY DRINKER CRITICIZED

Moscow KRASNAYA ZVEZDA in Russian 2 Jul 78 p 2

[Article by Colonel V. Izgarshev in the column "On the Trail of a Letter":
"But They Overlooked a Person"]

[Text] The village, bathed in sunlight, lies buried among the orchards. A warm wind surges against the crowns of the apple trees shedding their blossoms. And there is such a gush of paradise here that it is impossible to believe that right alongside, in that house beyond the garden, misfortune has fallen.

"Greetings, Dear Editor. My father, a praporshchik, drinks... He is causing a brawl in the house... I cannot study quietly. A number of times Mom and I have gone to the commander and the political worker, but they are not taking any steps. Please do help us in our distress..."

This is the kind of letter that was written to KRASNAYA ZVEZDA by ninth-grader Rita, daughter of an officer who is a senior mechanic of the TECH [technical maintenance unit] of one of the air units.

Before meeting Rita and her relatives I visited the regiment and the TECH where the officer is assigned.

The letter from the officer's daughter elicited no particular emotions in the deputy regimental commander for political affairs.

"Earlier her mother wrote letters, but now she has gotten the daughter to pen complaints."

"Why?"

"For no reason. This is their family business. The sister of the officer's wife, in order to divorce her husband, sent him to prison on complaints..."

"But the officer's wife doesn't intend, as you say, to divorce him?"

"No, she doesn't. But the complaints are coming. The officer, however, has an excellent record, he works commendably..."

Nearly the same conversation took place in the TECh. The TECh chief stated pointedly: "I don't believe a single word in the letter. This is not the first year that we've spent time on these complaints. Here, look for yourself."

A bulky file appeared on the table. It contained letters, copies of letters and replies, statements and other documents dated 1974 and subsequent years right up to the present. They were letters from the officer's wife, Raisa Andreyevna, addressed to the commander and to the political worker. Their content was the same: My husband drinks at home and makes scenes; help us in our misfortune. The content of the replies was also nearly identical: Instances of drunkenness have not been established, and the officer has not once been noted using alcohol on the job.

"This is their family concern. You understand, the sister of the officer's wife..."

The chief of the TECh, his deputy for political affairs, Senior Lieutenant Yu. Baranov, and other officers repeat what I had already heard from the regimental political worker.

"The daughter's letter contains slander. Can you really write that we indulge drunks in the unit?"

And the comrades cite a whole series of facts, like the Party organization, the community of the TECh, of the unit, that the commander has severely punished those who abused alcohol.

Why, that's the way it should be.

On the table there lie notebooks with the plans and the report of political and mass, Party and Komsomol work. In each of them are laid out steps aimed at the fight with drunkenness. Among them are talks by activists, doctors and meetings of personnel and wives of servicemen.

"And the officer's wife attended such events?"

"No, she did not attend," explains Yu. Baranov. "She lives in the village and works in town."

"And what about the officer?"

"He didn't attend, either. He lives far away and rides home on the train. He has served in the TECh for nearly two decades. He even reenlisted here... He has--take a look--only commendations in his record of punishments and incentives."

"He's a jack-of-all-trades, he works as much a two men," echoed Captain of the Technical Service Yu. Rupeyko, chief of the group, about the officer.

In a word, his record was good enough for an award. Nonetheless, what of these letters from his wife, and his daughter's letters calling for help?

And so, here is the village lost among the orchards, where the officer lives with his family in his own house. He is home on leave because of sickness. In his work clothes, puttering around the house, rather short, unshaven, Viktor Ivanovich seems considerably older than his age. I did not arrive alone. With me were the TECh chief, his deputy for political affairs, Major N. Goryunov, secretary of the Party organization.

"My wife is making this all up," says Viktor Ivanovich right off, sweeping aside all the complaints of his household as nasty nonsense. "And now, after my illness, I'm not even allowed to take a sip. The doctor warned me..."

And then the daughter appears in the room. Hearing her father's words and greeting us, she says sternly and reproachfully: "Dad, why are you telling people a lie? You're almost never sober at home..."

The officer starts bickering with his daughter.

On the other side of the house from the officer live his father- and mother-in-law, and across the road, opposite, lives his mother. The relatives are not only not friendly with one another but they do not associate with one another at all. We visited both houses and we heard so many horrors from each side about the behavior and life of the officer that only a dozen Sherlock Holmes have the power to sort it all out.

But if you try to separate the wheat from the chaff, the picture appears quite unlike the one that was created by what the unit officials related. And one is forced to only one conclusion: None of them took a serious interest in the officer's behavior outside the service. The initial premise was taken on faith: a fine specialist who does not violate discipline cannot be a souse, and any mark of bad behavior is slander. This stereotype was accepted as the basis for investigation of complaints.

The next day, the Party organization secretary and I called in the village again. The officer was not at home. His daughter and wife did not know where he was.

Viktor Ivanovich appeared about half an hour after our arrival. And the house immediately heated up with a family argument that exploded like a bomb; the officer's eyes glistened suspiciously--he had succeeded in getting hold of a drink. (So much for your "not allowed to take a sip".)

"We overlooked the person," said the Party organization secretary while we were returning to town. "His performance in the service and on the job shielded us from his behavior outside."

A belated conclusion but a true one. Of course, the officer himself bears responsibility for his behavior in the first place. But his chief and the community cannot be detached onlookers. And even less did the role suit them of being defenders of a drunk.

As for the stand of his wife and daughter--rigid and irreconcilable--one would like to advise them, too, to take a step toward their husband and father and try to soften their attitude toward him.

Before my departure, Raisa Andreyevna gave me a letter to read from her son, Igor', a soldier: "Mom, the service is interesting for me, it offers a person so much. Don't worry about me, as far as alcohol goes your warnings are not needed. At home I saw enough of what it leads to..."

I am deliberately not giving the officer's name. It is not a matter of name but of the problem. To see and know a person, to fight for him and to teach him--this is the duty of his chiefs and of the collective in which he serves. I would like to hope that in the unit they will be able to make the right conclusions from the letter from the officer's daughter and that they will help his relatives establish forever in the house beyond the garden the peace and well-being which they still lack so much.

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CSO: 1801

TRANSPORTATION PRIVILEGES FOR DISABLED VETERANS DESCRIBED

Moscow KRASNAYA ZVEZDA in Russian 6 Jul 78 p 4

[In the column "KRASNAYA ZVEZDA Reference Service": "Transportation for War Invalids"]

[Text] Readers N. Pavlov, I. Samsonov and many others are asking for an explanation of the procedure for furnishing transportation to war invalids.

War invalids with severely damaged lower extremities are furnished motorcycle vehicles or Zaporozhets automobiles with hand controls by the state. The vehicles are issued to them free at government expense: the motorcycle vehicle for a period of five years and the Zaporozhets automobile for seven years, with no right to sell or transfer them to other persons.

Those war invalids have the right to receive vehicles who have appropriate medical statements for them; that is, definite defects of the lower extremities, which deprive them of the ability to move about on their own or significantly hinder walking. In such a case **the war invalids** ought to have no other illnesses that prevent their driving an automobile or motorcycle vehicle.

Authorizations to receive the Zaporozhets, as well as the motorcycle vehicle are issued by the ministries of social security of the autonomous republics and by departments of social security of kray and oblast executive committees and the Moscow and Leningrad City Executive Committees of the Soviets of Peoples' Deputies.

At the present time war invalids having the right to receive free motorcycle vehicles are authorized the issuance instead of them of free Zaporozhets automobiles with hand controls, but only on the condition that such war invalids lack any contraindication against driving motor vehicles.

War invalids who were servicemen and who have already received a free motorcycle vehicle or Zaporozhets automobile with hand controls may receive a new motor vehicle free only at the expiration of the established five-year period of motorcycle use or seven years from the date of receipt of the automobile.

The Councils of Ministers of union- and autonomous republics, the executive committees of kray and oblast Soviets of Peoples' Deputies, and also the Moscow City and Leningrad City Executive Committees, have the right to decide the question of issuing free Zaporozhets automobiles in individual cases to war invalids of Group I who have medical contraindications against driving them if the automobile may be driven to serve the invalid by a member of his family who resides with him permanently.

In case of a war invalid's death, the free Zaporozhets passenger automobile received in accordance with current legislation remains the property of his family. In the absence of any family members of the deceased, it is subject to return to the social security agencies.

Training of war invalids to drive the Zaporozhets automobile and motorcycle vehicles is arranged by the social security agencies and conducted free at state expense.

A special procedure has been established for war invalids who do not have the right to receipt of a free Zaporozhets automobile with hand controls, by which they may buy passenger automobiles with ordinary control at wholesale prices. The sale is made by place of residence through specialized stores on the authorization of ministries of social security of union- and autonomous republics, and of kray, oblast and the Moscow and Leningrad city departments of social security.

9230

CSO: 1801

WORK OF GENERAL STAFF OFFICERS IN WW II DISCUSSED

Moscow KRASNAYA ZVEZDA in Russian 6 Jul 78 p 4

[Reader's letter and comment by I. Kulikov, Senior Scientist of the Central Archives, Ministry of Defense USSR, in the column "We Tell It at the Request of Readers": "In the Staff and on the Front Line"]

[Text] Dear Editors: In the memoirs of outstanding military leaders one frequently encounters references about officers who were representatives of the General Staff in the forces. Marshal of the Soviet Union G. K. Zhukov, for example, wrote in the book "Vospominaniya i rasmyshleniya" [Reminiscences and Reflections]: "The self-sacrificing and useful work of these General Staff officers has still not received ... description. These were combat officers who knew their job. Many of them gave their lives in the name of Victory. As modest laborers of the war they have earned our high gratitude and long remembrance."

Please tell about any of these officers of the General Staff.--Captain A. Soltanov.

Major N. Saltykov, an officer of the General Staff, arrived in the 63rd Cavalry Division, whose units were defending the passes of the El'brus mountain area in August 1942, on the very day that the situation worsened abruptly. An alarming communication was received: the enemy had occupied the Bass Pass.

The division commander and commissar were at that time with the commander of the front. After thoroughly studying and evaluating the situation, Saltykov sent urgent dispatches to the staff at the front and to the General Staff, and insisted on taking decisive steps. The next morning the staff received a communication that the Bass Pass had been recaptured from the Hitlerites.

This is only one episode from Saltykov's life on the front, but even it shows graphically what difficult situations General Staff officers sometimes had to contend with.

One might meet General Staff officers in the staff of the front and on the front line. With their assistance the General Staff maintained communication with the troops and the staffs of the army in action; received operational and specific information about the situation and the course of combat actions and the condition of the forces; and verified and monitored the execution of directives, orders and commands of the Supreme Commander-in-Chief and of the General Staff. They studied and summarized reports of combat actions, the application of new equipment and tactical methods, and methods of control during the course of operations carried out by our forces and the enemy's forces.

A group of General Staff officers, later reorganized into a corps of officers representing the General Staff, was established on 28 July 1941. Senior Lieutenant N. Saltykov (second-year student of the Military Academy imeni M. V. Frunze) was assigned to this group in September 1941.

General Staff officers delved into all aspects of the life and combat activity of the forces and worked in close contact with commanders and political workers. Besides studying operational matters related to preparation and conduct of operations, they uncovered the reasons for delay in the arrival of reserves and in deliveries of weapons, military equipment, ammunition and rations. In this way General Staff officers aided the command in solving many important matters. They had access to all operational documents of staffs. But their chief source of information was their personal observations of the course of a battle or engagement. "We reported only what we ourselves saw," Nikolay Dmitriyevich Saltykov remembers. "Sometimes we had to climb into the fire ourselves. A good number of General Staff officers died in battle for the Homeland."

On 23 June 1944 the forces of the Second Belorussian Front, where Colonel Saltykov was a senior officer of the General Staff, took a decided offensive and moved westward. On the morning of 25 June Nikolay Dmitriyevich, located in a unit of the 32nd Infantry Division, received contradictory information about the reasons for a sudden cessation of the offensive. In order to verify them, he went to one of the regiments. In a battle on the river Bas', on the distant approaches to Mogilev, he was severely wounded.

His treatment lasted for four years. His young organism and strong will triumphed. Nikolay Dmitriyevich graduated from the General Staff Academy. For many years he worked there as a senior instructor. He defended his graduate dissertation. Today Major General (Retired) N. D. Saltykov is carrying on a large public effort in military and patriotic upbringing of youth, and propaganda on the glorious military traditions of the Soviet Armed Forces.

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CSO: 1801

EMOTIONAL FACTOR IN FLIGHT TRAINING EXAMINED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 7, Jul 78 signed to press
31 May 78 p 33

[Article by Sr Lt Med Serv M. Reshetnikov: "Why This Mood Here?"]

[Text] Military Pilot 1st Class Maj I. Beskrovnyy arrived to fly in a good mood. And, everything went well the entire day and he executed the mission with ease and naturally. But then the commander called Beskrovnyy in and counseled him for errors committed by his subordinates. Not a trace of the good mood remained. And, ahead of him was a flight in a two-seat trainer as an instructor.

"If it had been a flight on a combat aircraft I would not have flown," the officer then said. "What kind of quality can one expect when your thoughts return all the time back to what had happened?"

And in fact what kind of quality indeed? But, sometimes during the rush of work a person is amazed when one speaks about the emotional state of a person who has committed an error. "Could mood have played a role here?" one sometimes hears in such cases. What then is the role of emotions when carrying out missions?

As practice shows, emotions have a powerful effect on many mental processes: thought, attention, memory. Thus, studying the progress made by a group of cadets, officer V. Marishchuk, Candidate of Psychological Sciences, explained that two-thirds of the low ratings for coordinated movements and approximately one-half of the evaluations for the distribution and transfer of attention were received by cadets who most exhibited external manifestations of emotions. Correspondingly, the number of low evaluations given to cadets with moderate emotional manifestations was almost three times less. Thus, emotions are a factor of importance for training and successful flying activities.

It is known that emotions can be categorized as sthenic (joy, anger) which vitalize and asthenic (fear, sadness) which suppress vitality. A person's

emotionality reaches its greatest height during youth. Therefore, the teachers and commanders in our school are especially careful in their relationships with the cadets and take their individual features into consideration. However, the results are not always identical.

Having been seriously counseled by the instructor for poor preparation for flights, cadet Priymak after some thought opened his notebook and again carefully studied the assignment and accomplished it with a high grade. But, the instructor should have used the identical method to influence cadet Merzlikin since the result was entirely different. After the discussion, the cadet went around for a long time in a suppressed mood and could not find himself.

"What is wrong?" the doctor asked him.

The lad sourly shrugged his shoulders. The doctor advised the instructor not to allow him to fly. Such varied emotions cause one to note that the one has sthenic emotions, whereas the other has asthenic emotions.

This must be taken into consideration during the process of training and indoctrinating pilots. One cannot go along with the opinion that the commander must not influence his subordinate since the time allotted for indoctrination will be lost. It is never too late to indoctrinate either youths or people of maturity, although it is considerably more difficult to indoctrinate the latter. In our view, the main thing in indoctrination is training an individual in the ability to counteract an emotional outburst with calm rationality.

The external expression of emotions--expression, gestures, and posture--are their very important and completely individual component. Expressive gestures and expressions achieve the most powerful influence on those around you. The sense of empathy is characteristic of man. And, in this regard, it is of course more enjoyable to work with people who always express a positive emotional background. Success and the quality of joint professional activities depend to a great degree on the presence of such people in a small collective like the flight or crew. It is for this reason that so much attention is now placed on the psychological compatibility of flying crews and other small collectives.

Realizing that emotions are contagious, one must always take into account restraining the experiences and controlling one's feelings, not allowing them to "contaminate" the emotional sphere of other persons for whom these emotions are not normal. For example, an individual has problems at home and he must not pass on his sadness to those with whom he works. Every individual certainly has encountered people who within the family or with subordinates are coarse and who explain this by their nervousness or the inability to restrain oneself. But, let these people talk with a senior commander or a chief and you would not even recognize them. They become models of courtesy. This means that they are able to control themselves

but, under specific conditions, they manifest elementary ill-breeding and lack of discipline. Unfortunately, we often forget that creation of a situation which rules out the manifestation of negative emotions depends on each one of us at work, at home, and in social gatherings and that people in a good mood not only complain less but also work better.

The nature and role of emotions are constantly being studied. Several years ago Soviet neurophysiologist P. Simonov proposed an informational theory of emotions in accordance with which asthenic emotions arise when the situation turns out to be not fully understood. Thus, fear arises when sufficient information required for successful defense or for getting out of a dangerous situation is lacking. Timely modeling of the situation and of their activities and their prognosis permits a pilot or a cadet to competently solve problems under complex circumstances.

These recommendations are successfully being implemented during the training of a pilot to operate in special flight conditions. However, emotions are not only expressions, gestures, and the tone and timbre of a voice. They are characterized along with physiological shifts: by a change in the bio-electric activity of the central nervous system, by the vitality of the endocrine glands and other very important centers which leads to such effects as the heart coming up in one's mouth or palpitations, paleness or a rosy face, constricted breathing, involuntary muscle tension, and so on.

People sometimes speak of unregistered emotions which usually lead to undesirable consequences. Actually, according to the common biological laws, fear or anger "trigger" physiological mechanisms which must provide for a physical reaction, in a primitive example--flight or battle. But, a person does not always find the necessary outlet. As a result, the emotions remain unregistered and a powerful storm builds up within the organism and unused substances and the products of their oxidation accumulate. In order to get rid of the stress, one must find a replacement activity, bring about an expenditure of energy through other means such as physical work, sports, and so on.

Other types of emotional hygiene also exist. This primarily is correct observance of a regime of work, rest, and food, daily physical exercises every morning accompanied by robust, rhythmical music. We do not notice how our brain assimilates the rhythm imposed upon it and how it even changes rhythmicity of the biological currents. Robust music makes them more sthenic. Naturally, prior to going to bed, the loudness and the rhythmicity must be toned down.

It is a good thing when a person is attracted to collecting stamps, envelopes, badges, in other words when he has some sort of interesting hobby. Having opened up the album, cassette, box, he switches the mental and emotional sphere and seems to cleanse himself of the load. When a leave is taken after intense work, it is desirable to first set up for several days the maximum possible mental calm and take oneself out of the stream

of information until such time as informational hunger is created. A course of aesthetic therapy--emotional sensations that run the gamut of variety which stem from a love of nature, architectural works, landscape, and so on--exerts a favorable influence on the psychoemotional sphere.

If one is not always able to cope with certain emotions or undesirable qualities of character, if negative experiences dominate, one must try types of autotraining (mental frequently repeated autosuggestion of desired qualities, self-encouragement, and self-dissuasion). This leads to a state of passive vigilance, i.e., prior to sleep on a background of relaxed muscles.

And finally, one must smile more often and pass on one's good mood to others and it will return to you multifold.

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CSO: 1801

PROBLEMS INVOLVING FLIGHT INSTRUCTORS DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 7, Jul 78 signed to press
31 May 78 pp 40-41

[Article by Maj Gen Avn A. Andrianov, Military Pilot 1st Class: "Who Are In the Trainer Cockpits?"]

[Text] Lifting off then into the heavens in a trainer, Capts A. Zhukov and T. Arkatov, of course, gave no thought to the fact that their two-seat trainer would inadvertantly go into a spin. The mission was relatively simple: a check flight in the zone for elementary flying at medium altitudes. True, this was the first time that the trainee, pilot Zhukov, had done this type of mission on an aircraft of this type during the conversion to a new aircraft. Yes, and Capt Arkatov had never flown in this type of two-seat trainer. But, both the chiefs and the pilots themselves felt that they were fully prepared for such a flight. Meanwhile, things turned out otherwise. The readout of the flight recorder showed that this is how things transpired in the heavens. Having occupied their zone at an altitude of 4,000 meters, Capt Zhukov went through the required actions in the cockpit, placed the wing in the required position, established the required speed, reported to the supervisor of flying, and set about accomplishment of the mission--he placed the aircraft into a 45° banked left turn. He initially accurately maintained the requisite parameters. Then, noting a small increase in speed and attempting to maintain the assigned speed, the pilot increased the bank to 65°, the G-load, and the angular rotation of the aircraft.

Due to the fact that the stick was pulled back towards him somewhat more than was required, the G-load exceeded that required for the given profile and the indicated airspeed began to fall. Buffeting resulted indicating that the angle of attack had been reached in which the flow breakaway on the wing occurs. The pilots sensed this. With a slight pressure on the stick, Capt Arkatov ceased a further increase in G-load and even somewhat cut back on it. Via intercom he reported to Zhukov that there was no need to set up the G-load so abruptly but himself did nothing to take over control of the aircraft and a further drop in speed continued.

The aircraft approached the critical angles of attack, the threshold of controlled flight. The pilots saw this. But, why didn't they react properly?

What manifested itself was the result of insufficient preparation by the officers on the ground just prior to this flight in developing coordinated actions in the air. They did not have mutual understanding. The trainee, Capt Zhukov, thought that the instructor, Capt Arkatov, was flying the aircraft and, in turn, the latter thought that Zhukov was flying the trainer.

Buffeting again occurred. Then, unexpectedly the aircraft transferred from a left bank to a right bank--to 110° and it began to rotate to the right along the longitudinal axis with a descent. It was only after this that the instructor began to take over--he placed the pedals in the neutral position attempting to select the necessary moment for taking over control. There was virtually no stress on the stick. For a second or so, the aircraft ceased rotation but it shuddered. Arkatov energetically placed the stick directly away from himself. The rotation of the trainer slowed down somewhat but then it went into a dive with an angle of 70° . What had happened?

As a result of the disparity between the G-load and the indicated air speed, the aircraft passed the supercritical angles of attack and inadvertently went into a spin--that is the direct cause of the very serious situation in which the crew found itself. And, this happened due to the passiveness of the instructor and his failure to fulfill his responsibilities. Capt Arkatov limited himself initially to the role of simple on-looker.

It is well known that a spin is a relatively dangerous phenomenon. It can lead to tragic circumstances. Had Capt Arkatov taken the necessary measures immediately, as soon as he saw that Capt Zhukov had exceeded the G-load required for the given speed, the flagrant error would have been ruled out completely.

Let's try to find the source of the incorrect conduct on the part of the instructor. I think that the discussion will be clearer if we take a quick look at a second case. It occurred under different circumstances and the pilots who were guilty of actions that could potentially cause an accident were flying in a helicopter.

Detachment commander Capt A. Bobrovskiy took Capt V. Yagin, also a detachment commander, up at night in bad weather. They were to make a landing pass employing the landing system at the established minimum. The weather was conducive to this.

They took off. At an altitude of 250 meters beneath the clouds Yagin put the helicopter into a right turn. During the turn the trainee let up in his monitoring of the position of the attitude indicator. The helicopter's bank increased and reached a dangerous level.

Capt Yagin's attempt to correct his error was not wreathed in success. The helicopter began to descend with a dive angle of 10° . But the instructor, Capt Bobrovskiy, sat there doing nothing. The helicopter went into a left spiral during which the speed increased to 100 kilometers per hour. And only after this occurred did the instructor take over control. However, he also acted improvidently. The speed fell to 50 kilometers per hour and the helicopter passed the threshold of control loss.

Capt Bobrovskiy did in fact correct the situation that had been created. However, he was only successful in getting the helicopter out of the spiral into horizontal flight at the very minimum altitude. The crew then successfully landed at their airfield.

What is there that is common to these two cases? As we see, they became possible due to the incorrect activities of the instructors and their failure to fulfill their responsibilities: Capts Arkatov and Bobrovskiy were late in beginning to correct the errors committed by the trainees. But, this reason, although it undoubtedly is the main reason, in and of itself is only a result of other deficiencies and errors in the organizational and flying methodological work.

We should look in more detail at this and touch upon the questions of organization and planning flights, the preparation of instructors, and a number of moments which refer in the main to the field of service mutual relations, as well as the moral-psychological climate in the crews who were carrying out the flights. We are firmly convinced that all of this exerts material influence on the quality of flying work and therefore are the determinants of flight safety. So then, a case in point.

Violations of the basic governing documents occurred in the training of Military Pilot 1st Class Capt Yagin for flights in bad weather at the established minimum. For such a difficult drill officer Yagin was provided a helicopter which he had never before flown (he had assimilated a new modification of the helicopter, i.e., in actuality both he and Capt Zhukov had converted). It was the deputy unit [chast'] commander that did this. Meanwhile, both he and subunit [podrazdeleniye] supervisory personnel knew well that this modification has its own special flying features.

To continue. It would have been advisable and absolutely correct to entrust the training of detachment commander Yagin to a well trained instructor. Capt Bobrovskiy flew in such weather at night as an instructor for the first time on that flight. It's easy to understand that he did not possess the necessary skills to properly evaluate the pilot's activities and be able to provide timely assistance to him in the case of necessity.

Analysis of the aircraft going inadvertantly into a spin leads to the same conclusion. Capt Arkatov also was unable to rapidly and properly

correct the errors made by Capt Zhukov. There also were flaws in his training as an instructor. It turned out that officer Arkatov had just been checked out for instructor flights on the new aircraft and on that memorable day he had flown for the first time in that capacity. Consequently, they placed Capt Arkatov in the back seat of the two-seat trainer and Capt Bobrovskiy in the right seat of the helicopter apparently only because at the required moment better-trained instructors were unavailable. Up to a certain time this deficiency did not make itself known but, in the final analysis, it created a great threat to flight safety.

Our leading commanders continually concern themselves about working with those who train and indoctrinate flying personnel. This work is carefully thought through, plans are compiled, and the bringing of the plan to fruition is systematically checked. This, naturally, gives good results.

In the subunit where Capt Zhukov leads one of the flights, things are done differently. Preparing to assimilate a new aircraft, for some reason here they gave little or no thought to the selection of those to whom they would entrust the training of pilots. And look what happened. Three officers completed the special training program as instructors. Soon thereafter, two were reassigned. The right to take students up fell on just one individual--Capt Arkatov. It is easy to imagine what difficult problems faced the supervisory staff.

Another common element in the two examples chosen is that all four who violated the rules of flight safety--were Military Pilots 1st Class. Zhukov and Arkatov are flight commanders and Yagin and Bobrovskiy are detachment commanders. In other words, in both instances the trainers and trainees were officers of equal position.

Is this proper? The answer is not quite as simple as it might seem at first glance. And the practice of combat training by the way provides examples which show that many mistakes occur when the teacher and the student occupy identical types of jobs.

We are convinced that clear confirmation of this can be factually stated. Let's compare some data from the flying biographies of Capts Zhukov and Arkatov. It will be of interest for our discussion. Zhukov is 5 years older than Arkatov, he finished school 4 years earlier, and has approximately 350 more flying hours. Finally, Zhukov received his 1st Class rating earlier than Arkatov.

Curious information, isn't it? It makes it possible to understand why instructor Arkatov did not correct the errors immediately: the great experience of the trainee negatively influenced him. Nor does Capt Arkatov himself deny this. In a conversation with the officers who were investigating the inadvertant entry into a spin, for example, he frankly stated:

"I saw that Zhukov was making mistakes but I initially felt that he would be able to correct them all himself."

"Then does this mean that such a great error would have occurred if it had been one of the pilots from your flight in the front seat?" they asked Arkatov.

"Of course not," the captain firmly answered. "In that case I would have taken over control."

Apparently Capt Bobrovskiy would explain his conduct in virtually the same way.

We are now discussing concrete facts. Life is varied and it cannot be ruled out that there can arise situations differing from that which we examined and, at the same time, to a certain degree similar to it. Let's try, for example, to imagine this.

Let's suppose that the knowhow of an instructor is a bit greater than that of his trainee but their jobs are identical. Is it advisable to plan a joint mission on a trainer aircraft for them? I don't think so.

The reader it goes without saying can object by saying that the crew in this instance is headed by the instructor. And, being senior although only temporarily, he must fully carry out his responsibilities. All of this, of course, is absolutely true,

But here there is one what I would call a psychological nuance which I am convinced cannot be ignored. Naturally, the mutual relations of a teacher and a student, even in flight, are built on the foundation of the requirements of combined-arms regulations and documents which govern flying. However, let's return to psychology. People are people. Comradely mutual relations are established, as a rule, between officers who occupy the same ranks on the service ladder. It is not completely ruled out that, due to these reasons, not every single instructor is able to correctly react to a particular situation which develops in the air, nor is he able in a timely manner to speak to the trainee if the latter errs. And it is completely understandable that this negatively influences flight safety.

There is a good way to eliminate flagrant errors and potential accident causes--unswerving improvement in the quality of work on indoctrination and training of instructors capable in any situation of fulfilling the responsibilities entrusted to them in a model fashion.

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CSO: 1801

TRAINING OF AVIATION MAINTENANCE PERSONNEL NOTED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 7, Jul 78 signed to press
31 May 78 pp 42-43

[Article by Engr-Capt V. Gusev: "Technical Training Effectiveness"]

[Text] The squadron commanded by Military Pilot 1st Class communist Maj V. Ponomarenko on that day was tasked with the interception of aerial targets at the distant approaches to protected installations. The tactical situation was complex and developed dynamically. The "enemy" aircraft came in from various directions echeloned in altitude, maneuvered energetically, and were covered by intense ECM. But, they did not succeed in breaking through the barrier that had been set up.

The engineer and technical personnel headed by communist officer L. Yavorskiy did a great deal to assist the pilots of the subunit [podrazdeleniye]. In spite of a shortage of time, the aviators worked diligently and readied the missile-equipped aircraft with high quality. There were no flight delays.

The example presented is not an exception. Engr-Capt Yavorskiy's subordinates were the first ones in the regiment to assimilate the new aircraft and are now steadfastly improving skills, searching for ways of improving the effectiveness of maintaining the aviation equipment, reducing the periods required to bring the equipment to combat readiness, and prepare it for repeat sorties. The troops of the other subunits and the regimental TECh [technical maintenance unit] are occupied in a similar way. Each of the combat collectives has accumulated specific knowhow and we would like to discuss it briefly.

The forms and methods of technical training for officers, warrant officers [praporshchik], sergeants, and soldiers are varied, as is known. Systematic improvement in the quality of the training process stipulates strict planning, continuity, and careful control over bringing the plans to fruition.

When it became known, for example, that Maj Ponomarenko's squadron as well as the regimental TECh specialists had to convert to a missile-equipped third-generation aircraft, an expanded meeting of the methodological council

was held. It was attended by representatives from higher headquarters, flight technicians, and group chiefs. The exchange of knowhow made it possible to determine the theme of the lessons and refine the number of hours required for particular themes. The unit [chast'] commander approved these recommendations.

The specialty engineers supervised the first lessons. All of them possess broad knowhow and are able to properly explain complex questions. It is characteristic that each of them concentrated the attention of the students on the fact that it was primarily necessary to excellently learn the new systems, mechanisms, and instruments. Communist Engr-Capt V. Bagnyuk, for example, wasted little time on repeating the arrangement and operating principle of the aircraft emergency escape system (SAPS) since it is almost exactly like that installed on the former aircraft. The officer spent more time questioning his subordinates, summed up their answers, and corrected those who made mistakes. He then placed a relatively large amount of time on the design and interoperability of the aggregates and assemblies that were unfamiliar to the aviators.

Officers A. Kilin, V. Mishukhin, and others took the same approach. They attempted to train their subordinates in professional and methodological mastery. Theory in each instance was closely connected with practice: the students immediately received advice and saw with their own eyes how to carry out a particular operation with the equipment.

Lessons in the squadron where Engr-Capt Yavorskiy is deputy commander for IAS [aviation engineering service] and in the regimental TECh were conducted in an organized manner. The good training of the leaders was not the only thing that came through. All specialists understood the importance of the matter and attempted to study the new aircraft in as much depth as possible. Undoubtedly, the party political work also played its role: discussion of pending tasks at party and Komsomol meetings, conversations with activists, and speeches by aviators who had previously converted to the new aircraft.

Prior to touching upon the other forms and methods which are being used in this unit to provide in depth technical knowledge to the troops, it would be useful to point out the following. By order of the regimental commander, many young mechanics were transferred to Maj Ponomarenko's squadron. At first glance it would seem more advisable to retrain the soldiers and sergeants in the third and even in the fourth period of service: they have both more knowledge and more knowhow. But IAS supervisory personnel took a different approach and began to train the young troops who had recently arrived in the collective. It goes without saying that the work with them required great expenditures of labor and time. However, the leaders understood that all of this would later be recouped. For the year to year and a half remaining before release into the reserves, the mechanics grow into highly-qualified specialists who can provide real assistance to engineers and technicians and who can train their own worthy replacements. In other words, such an approach to the matter looked towards the future and guarantees the preeminence in work with the aviation equipment

which, to specific degree, also stipulates a further increase in the combat readiness of the subunit and flight safety.

The technical training of aviators, just like the assimilation of any other discipline, includes both lessons in the classroom or in an aircraft, both training sessions and independent work, training in a lecture hall or in a group. But, in all instances this is the interaction of the leader and subordinates. The time expended on a particular theme and the quality of its assimilation are in direct dependence on the methodological mastery, the knowhow of the senior and the vitality of those whom he is training,

It is not for naught that so much attention is paid in the regiment to training IAS officers for lessons with personnel. The staff informs the leaders ahead of time of when and which theme will be taught. Here, the leaders mandatorily receive recommendations on how to use special literature, materials from periodicals, and visual aids. They have the chance to consult with the unit specialty engineers and the deputy squadron commanders for IAS,

At the appointed time the chiefs check the readiness of their subordinates to explain the assigned questions not in general terms but specifically using the missions which will have to be accomplished in the near future.

Once, for example, having checked the lesson plan of Sr Lt Tech Svcs S. Ivanov, Engr-Maj Kilin advised him to stress the study of safety measures when working with armaments, examine the portions of the document which discuss preparing the entire complex for combat employment, and to correct mistakes that are noted in the future.

Officer Ivanov accepted this advice. During the summing up the troops received the necessary information, refined their knowledge, and strengthened their skills. And as a result, during the flights not one of them made an error.

The pedagogical mastery of group chiefs officers A. Dudushko, V. Nasonov, and flight technician Ya. Zharskiy is spoken of highly in the unit. How do they organize technical training? Characteristic of their style of work is the accurate determination of the content of each exercise and the concrete nature of the explanation and demonstration. They, for example, do not overload the lesson with secondary data and useless material but concentrate the attention of the students on the main questions and combine passive and active forms of training. Therefore, no one feels like he is an onlooker during the lessons or drills.

The leaders assist the aviation specialists carefully determining the goal for each lesson and closely link it with pledges made in order to increase the viability of the training process. The concrete nature of the socialist competition and the timeliness in summing up its results have great influence here. The technicians and mechanics, as life shows, demonstrate a great deal of interest in the results of their labor.

Supervisors often assigned relatively complex tasks to Komsomol member Sr Lt Tech Svcs V. Korovin. There were times when the officer made mistakes. Seeing this, the chiefs did not rush to explain everything to him in detail but gave him an opportunity to correct things himself. And, you should have seen the joy on the aircraft technician's face when he found the correct answer. Gradually the young officer acquired a thirst for theoretical knowledge and he also strengthened his skills. The Komsomol member did a lot of independent work. Korovin has now been awarded the high classification of master. In recent times he has often fulfilled the responsibilities of flight technician and has assisted school graduates Lts Tech Svcs V. Golovnev and N. Kolpakov. As a result, both officers successfully passed their examinations for 3rd Class.

The grains of knowhow that are useful as well for other combat collectives have been accumulated in each of the unit's subunits. Therefore, the IAS supervisory personnel strive to insure that the knowhow becomes the property of all. Thus, in the squadron where officer B. Pan'kin is the deputy commander for IAS, the training of the officers in technical lectures and the sergeants and soldiers in technical groups has become a good support for common planned lessons. It is usually conducted on Saturdays and on days when there is no flying. The subject matter of the lectures and the groups is determined so that the trainees will every time recognize that which is new and will penetrate deeper into the essence of the physical processes which lay at the basis of the operation of systems, instruments, and mechanisms. And, technical training lessons are conducted in an interesting manner in the regimental TECH.

The IAS supervisory personnel from the unit, visiting the subunits, note that which is new and innovative. The knowhow of the best is generalized then at meetings and gatherings of the methodological council and recommendations are made for its implementation. For example, officer Pan'kin adopted a number of useful things from the practice of organizing training sessions in the TECH. And, his chief better knew how to prepare the lessons in the technical lecture sessions and groups within the squadrons.

The main goal of technical training is to provide IAS specialists with that sum of knowledge and skills which will permit them in minimum times and with high quality to accomplish various operations on the equipment. For in the final analysis it is on this that the combat readiness of the aircraft and flight safety depend.

The viability of all forms and methods of training is continually being checked. Systematic monitoring manifests itself in the holding of check sessions one or two times per month. Along with this, as a rule, record training sessions are held in the groups twice a week and two or three times a month at the squadron level. The questions and the scenarios are selected and compiled in such a way that the entire complex is covered in a two-three month period and that all of the actions of the specialists are developed to the point of automation. Group and individual discussions are held to monitor the training, especially independent training.

Our discussion would be incomplete if we did not touch upon, albeit briefly, renovation of technical classrooms. They are now equipped with new training aids made by the skilled members of the regiment. Thus, Engr-Sr Lt V. Mishukhin built an operating simulator for barometric-membrane instruments and SARPP [flight recorder]. A check-out installation for various types of checks on aviation armaments was developed by Sr Lt Tech Svcs S. Ivanov and Capt Tech Svcs V. Solomnykh built a similar installation for carrying out the 50- and 100-hour maintenance operations on the fighter's radio electronic equipment. These devices make it possible to conduct operations under permanent or field conditions. They also can be used as simulators for training IAS specialists.

The growth in the professional training of IAS personnel has made it possible to significantly reduce the time devoted to the maintenance of aviation equipment. If, for instance, Capt Yavorskiy's subordinates at first took several hours to assemble the wheels on the new fighters, then this is now done considerably more rapidly.

But, the specific successes certainly do not mean that there are not errors in the organization of technical training of the IAS personnel in this unit. Unfortunately, there have been. For example, Sr Lt Tech Svcs N. Tikhonov no longer maintains aircraft due to superficial knowledge and Lt Tech Svcs V. Sychev has not been allowed to take his exams for 3rd Class rating.

Regimental IAS supervisory personnel are taking measures so that similar things do not occur. A continual creative quest for improving the effectiveness of technical training of specialists in the aviation engineering service is under way.

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CSO: 1801

TRAINING MAINTENANCE PERSONNEL TO SERVICE NEW AIRCRAFT EXAMINED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 7, Jul 78 signed to press
31 May 78 P 44

[Article by Engr-Col V. Nefedov: "Competition During Conversion"]

[Text] I recently visited the squadron where Ye. Spichkin heads the aviation engineering service [IAS]. A routine flying shift had just ended at the airfield. Concluding the inspection of an aircraft which had made a sortie to the range, Maj Tech Svcs Spichkin began to get ready for the critique and assignment of preliminary training tasks to his subordinates.

The first thing he did was to again speak with the flight technicians and the maintenance group chiefs and refine the data required for the critique where they would discuss the actions of the specialists during the flights. When determining the victors in the socialist competition, communist Spichkin took into consideration the opinion of the party and Komsomol activists. This was also important because the personnel are assimilating complex combat equipment.

Conversion to a new aircraft, as is known, requires from each aviator enormous stress, mobilization of all moral and physical forces, exceptional coordination, and efficiency. And, a great deal here depends upon the activities of the officer leaders, their creative approach to the task. For everything must be carefully planned and foreseen and one must be able to find the crux from the multitude of various measures taken during that period in the squadron. Moreover, all must be accomplished so that there is no lagging in other sectors.

During the conversion process, as knowhow shows, an enormous load is placed on the shoulders of the deputy subunit [podrazdeleniye] IAS commander. At that moment the engineer is called upon to solve several complex questions: occupy himself with manning the training groups, determination of who and in what sequence to begin the conversion. One must think also about re-equipping the classrooms and providing them with the necessary visual aids, as well as concern oneself about intensification of the training process.

The new equipment introduced material corrections into the training facility. Now, being in a subunit which is assimilating a modern aircraft, you are convinced with your own eyes of the role that training classrooms in the squadron play in the intensification of the training process. Prior to beginning the study of the systems and aggregates aboard a new winged vehicle, upon Maj Tech Svcs Spichkin's initiative, the aviators are drawing diagrams, graphs, building displays, and collecting literature. The chiefs of the maintenance groups, flight and aircraft technicians, and other specialists assisted the officer.

The communists and Komsomol members showed up well in this matter. For instance, officers N. Doshchenko, T. Lyubchenko, and N. Medetskiy operated with initiative, creativity, and in a business-like manner. Dozens of original visual aids and operating displays which assisted the aviators in expanding their technical outlook and facilitated successful conversion were manufactured under their leadership.

Planning which emphasized effective utilization of each hour of training time was underway while the training facilities were being prepared. Officer Spichkin succeeded in correctly determining the volume of the tasks linked to the conversion and skillfully dispersed qualified specialists to the vital sectors. In addition, he organized the socialist competition for an outstanding result of each training day. All of the innovations suggested by the IAS communist-leader were fully supported by the squadron commander.

On the eve of and during the assimilation of the new aircraft, squadron supervisory personnel were continually assisted by unit [chast'] IAS supervisors and primarily by officer V. Masikevich, deputy commander for IAS. Thus, the officer assisted the squadron commander and his deputy for IAS in compiling lesson plans for the technical training with the pilots and the personnel of the aviation engineering service and selection of the most experienced leaders. Engr-Maj Masikevich also placed serious attention on the elaboration of the subject matter for training lessons, organization of drills, and improving the methodological mastery of the officers who were tasked with organizing and conducting the training with the aviators directly with the new aircraft.

The engineers from the special services spent a great deal of time in the squadron. They participated in equipping classrooms, creation of operating displays, compilation of schematics, graphs, and tables covering the specific systems and aggregates aboard the missile carrier, and led lessons and training sessions. The deputy squadron commanders for IAS, group chiefs, and flight technicians did not stand aside but supported in every way possible the creative initiative of each individual and assisted them in realizing that which was planned and avoiding errors.

The following case comes to mind. One of the group chiefs during a drill on uploading missiles was unable to achieve high competition in the work of the young specialists. Then the regimental engineer for armaments

decided to check how the young officer had prepared himself for the lessons with his subordinates and how he conducts them. The experienced tutor noted that the lieutenant, as a rule, fails to leave time for summing up results. Therefore, concluding the drill, the group chief does not always evaluate the results of the labor of the specialists and does not inform them of those who lag behind and what the laggards' indicators were. Nor did he possess skills in organizing lessons.

Similar deficiencies were brought to light in other groups as well. A meeting of the unit methodological council examined the question of improving the methodological mastery of officer-leaders. The best methodologists were invited to the meeting. A principled and business-like conversation resulted and specific measures for improving the methodological mastery of lesson, drill, and technical training session leaders were elaborated and noted collectively.

In particular, they decided to hold a seminar at which they would fully discuss the development of competition during the study of new aviation equipment. And, communist Spichkin proposed the creation of a group of instructors which would include the most skillful specialists and best methodologists. Realization of this proposal, as knowhow shows, proved itself completely and made it possible to not only intensify the lessons and strengthen the monitoring of the quality of the study and assimilation of a new aircraft but also to free time for the analysis of the activities of the specialists and the progress of competition between them.

Now at the end of a training session or a demonstration lesson directly with the combat equipment or in the process of these sessions, the officers must provide an evaluation of the activities of the subordinates, compile their results, and the competition continues on with new force. Interesting ideas manifest themselves and valuable proposals result.

The flying and the engineer-technical staff at an inspection received a high evaluation as a result of such an approach to an assimilation of new aviation equipment.

The goal-oriented work of the squadron party and Komsomol organizations undoubtedly played a great role in the achievement of success. Communists and Komsomol members demonstrated a personal example in assimilation of the complex missile-equipped aircraft and its systems and aggregates. They were the initiators of the battle for the excellent result of each day of ground training, and of each flying shift, and effective utilization of time for the purpose of improving combat training of aviators.

The propaganda of leading knowhow was also actively conducted. Various forms were also used to achieve this, including meetings with the best aviators. Their successes were clearly expressed in visual agitation: "flash" leaflets, photo and wall newspapers, battle leaflets, and in

local radio programs. Based upon the initiative of the communists, for example, socialist competition for an improvement in technical culture, rational equipping of working spaces, and model execution of every mission unfolded at the start of the period of assimilation of the third-generation aircraft.

Today this squadron confidently leads in the socialist competition of the regiment's subunits. During the second training period of the jubilee year the personnel of the leading squadron will strive to fortify and multiply that which has been achieved. It will labor with high patriotic enthusiasm, a good mood, and replete with the decisiveness to reach new boundaries in combat training.

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CSO: 1801

TRAINING ACTIVITIES ABOARD A LARGE ASW SHIP DESCRIBED

Moscow SOVETSKIY VOIN in Russian No 13, Jul 78 signed to press 14 Jun 78
pp 9-13

[Article by Lt Col Vladislav Shurygin and Capt Viktor Gribov: "Stern Ocean Service"]

[Text] "For Combat and Sea Duty...."

The large ASW ship was preparing to put to sea. It was preparing for a missile firing exercise, upon which much depended in the biography of the ship and its crew at this stage of combat training.

In the depths of the ship machinery was idling silently, hot air was streaming skyward from large pipes, one of the radar antennas was being test-rotated, emitting a metallic creaking sound, cranes were snarling and, suspended above the deck, powerful-looking antiaircraft missiles were disappearing into the bowels of the ship....

All this would have been a spectral, electronic-cold sight if it had not been for the people animating the shore and combat equipment. Navy men were knowledgeably operating the equipment and machinery, energetically loading combat supplies, heaving on block and tackle and carrying on their strong young shoulders cases of provisions and spare parts for the ship's machinery and equipment....

Finally the loading was completed, and activity on the pier died away. The large ASW ship was breathing deeply and powerfully. Darkness was encroaching on the sea, bay and cliffs. It was time to rest, but the ship's intercom suddenly barked: "Now hear this! Man your stations! Stand ready to put to sea!"

...Water gurgled and slapped against the hull. The sea, invisible in the darkness, could be distinguished only by the whitecaps.

"Yuriy Nikolayevich, are we heading out to sea?"

"Not yet. We have one more training problem. Docking and refueling."

"Right now, in the dark?"

"Affirmative."

It was our first conversation with the ship's deputy commander for political affairs, Captain-Lieutenant Makarchuk.... There would be other conversations later, or put more accurately, in the modern jargon, constant contact with him, with the other officers and men of the large ASW ship, and acquaintance with an amicable, smoothly-running crew and with rich military traditions. The ship has many times visited distant waters, has carried the flag of the Navy of the USSR above the waves of distant seas and oceans, and has successfully accomplished difficult tasks. Nor could it have been otherwise: the crew and ship are at that excellent level where all the ship's specialists -- helmsmen, sonar operators, radiometrists, missile crews, and turbine mechanics have achieved a certain past-sought threshold of skill above which today all seek to perform and below which nobody dares perform.

In 1975 the ship took part in competition for the USSR Navy prize for mock submarine search and took the Pacific Fleet championship.

The ship reinforced its success in 1976 in similar, but more difficult naval competitions.

It is not easy to be first, at the forefront, when all ships in the fleet are striving to win and to achieve mastery. At this level the struggle is continuous and without quarter.

The main function of a large ASW ship is to search for, find and "destroy" "aggressor" submarines. Of course the "aggressor" will attempt to defeat the ASW ship with all means and capabilities. Hence the ship's missions pertaining to its own protection and defense. As they say, attack, but don't forget about defense!

The large ASW ship will be performing such a mission tomorrow at dawn. We shall discuss the mission in detail.

In the meantime the deputy commander for political affairs was giving us a briefing, naming the ship's leading combat departments and top officers....

"Sr Lt Aleksandr Borisovich Gromov, commander of CD-1, Boris Nikolayevich Kolodkin, commander of CD-4, Lt Yuriy Anatol'yevich Glebov, commander of the bilge team of CD-5...."

Our memory was taxed to translate the naval designations and terms into terms comprehensible to the landlubber: Combat Department-1 -- Navigation Department, CD-4 -- Surveillance and Communications, CD-5 -- everything connected with the ship's running and integrity....

Regardless of whatever flattering thing they say about the officers, for some time to come they will remain merely input data, a reference point for more rapid acquaintanceship. Then they will take on details, actions, mesh, and create character and personality.

Sr Lt Aleksandr Borisovich Gromov is the son of a combat veteran. He graduated from higher naval school in 1972.

Now Gromov is in charge of CD-1: the ship's entire navigation and personnel. The skills of the political worker are very helpful here -- Gromov has full contact with his subordinates. Emulating their commander, they seek to master their job.

As regards the executive officer, Capt-Lt Anatoliy Mikhaylovich Simkin, I know that at the age of 24, that is, three years after graduating from higher naval school with distinction, he became executive officer of this large ASW ship. Anatoliy Mikhaylovich is now 27. He has been on several long cruises and has considerable experience in working with men and combat equipment. The young executive officer constantly receives a know-how assist from the ship's commander -- an experienced officer who possesses total mastery of his job.

Finally, I know about Capt-Lt Yuriy Nikolayevich Makarchuk that he is in his fourth year as deputy commander for political affairs of this large ASW ship. He is a correspondence student at the Military-Political Academy imeni V. I. Lenin.

I know that he is married, and that his sons, Valeriy and Yuriy, are constantly pestering their father with the question: "Daddy! When are you going to live at home?"

He laughs the matter off. He promises. Or the following conversation might take place between father and sons.

"I've got to hurry to the ship, boys!" "Will you be at sea long?" "I don't know...." "I get it. Military secret!"

The good old days.... The age of white-winged clippers and frigates. Russian seamen sailed the distant seas and oceans. But in those days the world was not so cluttered with military bases, the air was not penetrated by the energy of super-powerful radars, did not shake with the roar of the turbine engines of missile-armed aircraft, and the depths of the oceans were not coursed by black cigar-shaped nuclear submarines....

And even on the eve of World War II, when the seas were coursed by squadrons of battleships, U.S. and Japanese floating cities -- aircraft carriers, our fathers and grandfathers in the navy did not very often travel far from native shores or for a long period of time.

Today times have changed. It is the nuclear missile age.... And our fleet has become a blue-water missile-armed navy....

The Red-Banner Pacific Fleet has everything necessary to offer a devastating rebuff to any aggressor.

Night Docking

The painter Kuindzhi should be here! To celebrate the grandeur of this moonlit night: beyond the gunwale a golden, sparkling path divided the sea in two....

The ship's superstructures float majestically and ominously in the dark sky against the background of the moon-backlit clouds. The grillwork colanders of the restless antennas sift the night, and a soft blue light fuses uneasily on the torpedo tubes and predatory barrels of the quad-mounted automatic antiaircraft guns, making the faces of the men on watch stern and filled with inner tension....

And yet this is both true and not true, just as in life: sternness exists side by side with humor, dreams with reality.... Joking as they go, the mooring team -- a group of tall, powerful fellows -- hastens toward the quarterdeck. Members include POs Vasiliy Sindishov and Viktor Chudakov, Sr Sn Vasiliy Sokhnin and several of their comrades.

"Shake a leg, lads!" Engr-Capt-Lt Anatoliy Anatol'yevich Zherebko -- a tall, solidly-built fellow with a neatly-trimmed, typically Ukrainian moustache and constantly laughing, kindly eyes -- urges on his men more for procedure, "to test his voice."

We entertain in our minds a persistent image, obtained from books and movies, of powerful, loud-voiced boatswains and their mooring team -- wind-tanned, salt-encrusted seamen with bulging muscles and callouses. Steel muscles and catlike tenacity, a keen eye and a powerful voice continue to be desirable attributes. Except that the mooring of a modern warship, and in particular our large ASW ship, is performed by CD-2 -- artillerymen and missile crews. This shows the versatility of today's seaman!

The ship's deck trembled. At the stern the water was seething and pounding -- the ship was slowing. The shore was slowly advancing out of the darkness.

On the port side the ship's launch was about to be lowered: part of the docking team would take the launch, receive the fuel hoses and pass them to the ship. The lowering of the launch was supervised by the executive officer, Capt-Lt Simkin. He would accompany the mooring team to the shore. A voice came over the ship's intercom, informing the crew of operations time, that is, the specific time assigned the crew by the captain to perform a given specific task, in this case for docking and refueling.

The launch's motor was fired up. The ship was approaching the shore stern first, and Anatoliy Anatol'yevich Zherebko was counting off into a microphone (for the ship's captain and the watch officer) the estimated number of meters remaining between ship and shore: "250, 230, 200...." (It seemed twice as close!)

It must take a lot of work and practice to be able to gauge by eye the distance between ship and shore unerringly and in all weather. I realize that precision instruments exist, but man should not lose his professional capabilities!

Flashlights on shore merrily sparkled in the darkness -- the docking team was indicating the edge of the pier.... The ship's searchlights were switched on. They illuminated the approaching pier and the sailors standing on it.

"Sixty!" the imperturbable Captain-Lieutenant Zherebko continued counting off, but apparently the critical time had arrived, and he commanded: "Cast lines ashore!"

Two seamen, just like cowboys, dashingly cast their "lassos." On the pier a voice rang out: "Watch out for mooring lines!" The men froze for a second, then rushed toward the mooring lines, which had landed alongside. Get moving! Look sharp! Now not only the mooring team was working, but also the ship's captain and watch officer, navigation officer and helmsman, and the men in the engine room.... The ship's anchors and equipment were also working.

Night docking in a swell requires great skill. And we must say that our ASW ship executed it masterfully. And the ship performed the refueling operation within the time frame designated by the commander -- within operations time.

Unable to restrain myself, I mentioned this to Captain-Lieutenant Zherebko. He smiled: "The weather is great! You should see how my lads tied the ship up in winter to ice-covered stanchions...." He did not relate the story to me, nor was it necessary: for some reason I could picture just how this took place.... The main thing is that they can do it when things are difficult. That is the reason why they had such an easy time on this occasion.

Outstanding performers? Of course they were. They were the petty officers and seamen named at the beginning of our story: Vasiliy Sindishov, Viktor Chudakov, Vladimir Sokhnin... plus the entire crew of the large ASW ship.

...The sea at night, a rolling dark shore and pier, a launch advancing toward the ominously-growling surf and, finally, the moon floating placidly above the ship's superstructures -- are these not signs of the romance of the sea which has entered the flesh and blood of every navyman? It was really a fine sight!

Missile Combat

"We threaten nobody. Talk about a so-called 'Soviet threat' is a patent fabrication by the opponents of détente and nothing more.

"We are improving our defense with a single goal in mind: reliably to defend the achievements of the Great October Revolution and firmly to guard the peaceful labor of Soviet citizens, our friends and allies."

L. I. Brezhnev

A faded gray sea was spread out around us. It probably would transition to ocean without any perceptible boundaries or paths....

We were the lead ship, heading out into a missile firing area....

On the previous day the ship's commander had told us how important and critical the missile firing would be. I recall that the captain was tapping his pencil on a blue quadrant on a chart. "A rocket target will be heading toward us from a distant launch point. Have you heard about target effective reflecting surface? Good. The effective reflecting surface of this target will be very small, and it will be traveling at an enormous speed.... We must spot and down the target at a specified range...."

The commander was seated on his "throne" -- in a chair in the main control room, and seemed wrapped up in his own thoughts. Whenever the radio would crackle and hiss, however, the commander would issue requisite instructions or would listen to a string of reports from his subordinates. And then, resting his cheek on his fist, he would again gaze out at sea....

Simkin, the ship's executive officer, stood several steps from the "throne." He knew his commanding officer so well that at times a single gesture, or say that fist supporting his cheek, would mean an ironic: "You are standing there dreaming, lads. Well... who is going to prepare to make the turn for you? We are right by the flagship."

"Navigator! How long until the turn?" the executive officer queried.

"I'm keeping track. Three minutes remain," came the reply. Senior Lieutenant Gromov knew his job.

The helmsman, Sr Sn Vasiliy Buzdygan, confidently held the wheel; that small wheel with its many projecting wooden handles seemed a toy in his large, powerful hands. Navigation officer Gromov had made a flattering comment about Vasiliy. He was a calm, efficient and hardy fellow in heavy seas and gale winds. These were mandatory qualities for a skilled helmsman, a specialist 1st class.

While the ship was readying to initiate the turn, I decided to take a tour of the ship's principal stations in order to see what the men were doing and how they felt just before a missile firing exercise. My desire coincided with that of the deputy commander for political affairs. "But let's not approach the radar operators right now. We don't want to divert their attention, alright?" Alright.

...Specialist 1st Class Nikolay Koval'skiy was on duty in the sonar room. The scopes showed typical uniform pulses....

"How are things down below?"

"All quiet for the moment!" replied Koval'skiy.

"For the moment" -- an interesting, vigilant expression! The sonar operator and the entire ship were prepared at any moment to engage an undersea "adversary."

...The combat information center. CIC. Several men were stationed alongside a plotting board. Lt Vyacheslav Viktorovich Kostin sensed his team like a skilled symphony conductor. He himself was a specialist 2d class and a member of Komsomol (when we met he said jokingly: "I shall not give up Komsomol; I shall be eternally young!")

He is indeed not parting company with Komsomol. The CIC team are Komsomol members and excellent-rated. They are also students.

Sr Sn Arshak Sarkisyan, Sn Sergey Matveyev, and PO 1st Class Vladimir Kuznetsov had been students at higher educational institutions and secondary technical schools before entering the navy.

Now they are 1st-class specialists in military affairs. A crimson pennant hangs on a bulkhead, awarded for winning socialist competition in honor of the 18th Komsomol Congress.

The congress has ended, but the broad Komsomol horizons opened up by it excite and call upon the men to achieve new success at their present posts.

Everybody was hunched over the plotting board....

...CD-5. Sr Sns Viktor Bunakov and Ivan Pol'skikh were running the ship's powerful propulsion unit. Engr-Lt Yuriy Anatol'yevich Glebov was on duty alongside them.

The men in the engine room responded immediately to every command from the main control room. The ship's deputy commander for political affairs explained: "The people in CD-5 are an intelligent, smoothly-running team. Bunakov and Pol'skikh, for example, are in competition with each other. Bunakov is 2d class, and several times now Pol'skikh has approached me -- he wants very badly to catch up with his comrades. Lt Glebov says that Pol'skikh is ready to take the test for second class, but it is unlikely that he will catch up with his comrade, for Bunakov has not been marking time and is ready to take the test for 1st class."

I recall that during a submarine search a scenario change was announced: a certain instrument had "failed." CD-5 did an excellent job handling a difficult problem. Speed was maintained, and the replacement met performance standards. An excellent job was done by PO 1st Class Viktor Onenko, Sr Sns Viktor Berestnev and Sergey Chernov. These men are high-class specialists, under Engr-Capt-Lt Vladimir Borisovich Sobolev.

...We visited sick bay. Everything was sparkling white. Bottles and vials of medicines were neatly arrayed in special cabinets, and the surgical instruments gleamed.

There were no patients in sickbay. Sr Lt Med Serv Valeriy Ivanovich Manyuta knows his difficult job well. He has been on several extended cruises. He has performed four appendicitis operations under difficult conditions, in heavy seas. All were successful. Two of his former patients -- POs 2d Class Oleg Gura and Viktor Alekseyev -- are still serving on this ship.

"Who assisted you, Valeriy Ivanovich?"

"I have a medical assistant, PO 2d Class Boris Simakov. Sn Fedor Sitnikov passed the instruments."

They performed the most recent operation during a heavy gale.

The intercom (always on) interrupted our conversation at the most interesting place: "General quarters! General quarters!" Loud bells began sounding.

Heels clattered on companionways. Antiaircraft gunners in gray helmets, gas masks slung over their shoulder, were hurrying to take their stations by the quad mounts. We hurried to the main control room. The loudspeaker was pouring forth with a hail of reports that the combat departments were ready for action. Things then became quiet. Men reporting to the control room were vigorously dogging down the armored glass covers. The ship was ready for action (the commander donned a cap, stood up and went over to the CRT displays).

"Number one engine, add 10 revolutions!" (This was the commander speaking) We could feel the hull trembling and vibrating, while the sea outside appeared frozen in place. The antiaircraft gun crews in their gray helmets were motionless....

The commander picked up the microphone: "Air attack threat from the west!"

Immediately reports poured from the speakers. We could see the barrels of the antiaircraft mounts moving in that direction.... Everything was proceeding in strict order -- the ship bristled with gun barrels, and antiaircraft missiles were ready for action....

It was H-hour. The seconds dragged by. There was silence on the airwaves and on the intercom. When would something happen? Beyond the partition the navigation officer softly joked about the target rocket launch crew: "They can't find a match...." Then came the sharp, ominous message: "Rocket airborne!"

The men went to work. Radiometrists, missile crews and radar operators waited tensely. Waiting for target contact is a feeling that cannot be adequately conveyed.

Seconds passed. How about it, radar operators! Let's go! I can see even now the specialists 1st class and master proficiency-rated personnel pushing all levers and pedals -- bending radio beams to the waves. The rocket was speeding toward the ship. Contact was reported; the ship immediately

fired a missile. The next missile was ready to go.... A brief and triumphant report came: "Target destroyed. One missile fired."

What jubilation! The men were smiling happily. I wanted to congratulate and shake the hands of every one of them. The commander was speaking by telephone to the missile crew, to find out who was the first to spot and engage the target. They told him the man's name. The commander sat down in his chair. He triumphantly picked up the microphone and proceeded to announce to the entire crew: "For intelligent actions and initiative, radar operator Sr Sn Sergey Ivanovich Mogil'da will be given a short home leave!"

And he added, for all of those who have distinguished themselves in the engagement: "Good lads, missilemen!"

...It was evening, in the wardroom. We were eating supper. The atmosphere was warm, I would say familial. The ship's commander, Yuriy Ivanovich, was seated at the head of the table. Seated at the other end was the ship's executive officer, Anatoliy Mikhaylovich Simkin. The officers and entire crew were having supper.

The men were engaged in sedate conversation and repartee. The doctor made a cautious comment about giving the officers shore leave. A few hours travel by whatever transportation they could obtain. Somebody reminded them that Sunday was almost at an end (the engagement had taken place on Saturday. The joking died down, and the lieutenants and captain-lieutenants looked over toward Yuriy Ivanovich. The commanding officer narrowed his eyes slyly. It seemed as if he would reply: "Fine, you can go!"

However, Yuriy Ivanovich did not reply. Perhaps he knew something which was still too early to announce even in the wardroom.

Such was the case. That night the ship cast off and headed out on a new mission.

The stern service was calling its commanders and seamen.

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CSO: 1801

SOVIET, EAST GERMAN ARMED FORCES COOPERATION RECOUNTED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 7, Jul 78
signed to press 22 Jun 78 pp 65-71

[Article by NPA Dr Col G. Jokel, NPA Dr Col T. Nelles,
K.-U. Keubke: "The Development of Combat Cooperation Between
the GDR NPA and the Soviet Army During the 70's"]

[Text] As long as imperialism exists, the military unity of the socialist countries is an historical necessity. Since its formation, the Warsaw Pact Organization has been a reliable guarantor of peace and the defense of socialism's accomplishments, democracy and progress. The USSR and its valiant Armed Forces play a decisive role in it. For over six decades, the Soviet Union has been doing everything possible to defend peace. A steadfast struggle against the arms race and for universal and complete disarmament--these noble goals of Soviet foreign policy are consolidated in the USSR Constitution. "Ensuring a firm, stable peace," Comrade L. I. Brezhnev, general secretary of the CPSU Central Committee and chairman of the USSR Supreme Soviet Presidium, emphasized at the 18th Komsomol Congress, "this is the goal of our foreign policy and the role of its most important principles, such as peaceful coexistence and relaxation of international tension."¹

Lately, the balance of power has changed significantly in the international arena. Socialism is in a strategic offensive. Imperialism has been driven back. However, its aggressive nature has not changed. Not wishing to come to grips with the loss of their positions, the reactionary forces of the leading capitalist powers are undertaking new attacks against the improvement in the international climate. They are stirring up the arms race, actively conducting slanderous anticommunist, especially antisoviet campaigns, creating hot spots of tension and unleashing local wars in different areas of the globe.

Under these conditions, the socialist states' responsibility for preserving peace is continually growing; a high level of vigilance

and a constant concern for strengthening the defense capability of the socialist commonwealth countries are required. It is not by accident that the program documents of the CPSU and the other fraternal parties devote a great deal of attention to maintaining the combat readiness and combat effectiveness of the armed forces at the required level and to further strengthening cooperation between armies. For example, it was recorded in the decisions of the 8th SED [German Socialist Unity Party] Congress: "Combat cooperation between the Soviet Army and the armed forces of the other states of the Warsaw Pact is a requirement of socialist internationalism and it creates a firm foundation for our security."²

The party's instructions are being steadfastly implemented. In December 1973, the 11th SED Central Committee Plenum set the task "to work shoulder to shoulder with the 'neighboring regiment' in combat training and army life. Each serviceman must participate in strengthening combat cooperation, learn from the famous Soviet Army and imitate it."³

As E. Honecker, general secretary of the SED Central Committee and chairman of the GDR National Defense Council, pointed out, the country is working "to completely fulfill the plans which were jointly adopted, intensify joint action and combat cooperation between our armies and improve the activity of the leadership bodies of the Warsaw Pact military organization."⁴ Many joint documents are permeated with constant concern for this goal. Among them, the plans for cooperation which were developed by the GDR Ministry of National Defense and the command element of the Group of Soviet Forces in Germany (GSFG), as well as the working plans on this issue for the large units and units of both parties, should be mentioned. These documents are refined on an annual basis.

In accordance with them, commanders at different levels exchange work experience on a regular basis; while accomplishing the combat training program, they conduct numerous joint measures for servicemen during the traditional "combat cooperation week." Contact with the "neighboring regiment" has become permanent and comprehensive in nature. Moreover, commanders, political workers, party and youth organizations are seeing to it that the need for this joint effort and combat cooperation with the soldiers of fraternal armies is firmly engrained in the awareness of all servicemen; this need was pointed out by Mar SU D. F. Ustinov, USSR Minister of Defense, during the Soviet military delegation's visit to the GDR in April 1977.⁵

Close cooperation between political agencies serves to strengthen the combat alliance; along with an active exchange of delegations, this close cooperation includes conducting joint party, political and scientific events. Thus, in 1970 and 1973, the Main Political Directorate of the National People's Army (NPA) conducted a meeting at which the leading officials of the political agencies of the Soviet Army and the other socialist armies discussed the tasks for further improving ideological and political work among the troops and the problems of the struggle against ideological diversions on the part of NATO.⁶ Mutual consultations between political agencies and party and public organizations at different levels began to be practiced more frequently. During the joint events which are being conducted, emphasis is placed on unmasking imperialism's aggressive nature, its military operations and slanderous anticommunist campaigns and on showing the dangers which threaten the cause of peace. For this purpose, appearances by lecturers and speakers before the personnel of subunits of the fraternal armies, joint theoretical conferences and meetings with members of the antifascist Resistance Movement are organized on a regular basis. Cooperation between army press agencies and film studios has been strengthened.

The illustrated wall newspapers of the "neighboring regiment," which tell about the daily life of the soldiers of the fraternal army, as well as the events connected with the revolutionary and combat traditions of the people of our countries, arouse a great deal of interest in the soldiers. The creation of combat cooperation offices, joint visits to museums and rooms of combat glory and tours to sites of major engagements during the Great Patriotic War and to memorial sites have become an integral part of the work in developing revolutionary and combat traditions.⁷

The new documents on combat training which were adopted in all the services of the armed forces, branch arms and special services of the NPA during 1973-1974 were highly significant: the manuals, syllabuses and regulations on tactics, organizing reconnaissance and fire preparations; they are based upon the corresponding documents of the USSR Armed Forces.⁸ On one hand, this created rich opportunities for further increasing the level of combat training for the NPA and, on the other hand, it created rich opportunities for developing combat cooperation with the Soviet Army. The numerous examples of joint exercises in units and subunits testify to their widespread and efficient utilization. Thus, in the Julian Marchlewski Tank Regiment, competitions are conducted between specialists of both armies in specific units of combat training: firing training and standard rounds, driving

tanks and motor vehicles, establishing communication, laying bridges and using certain training facilities. Training is conducted for groups and crews made up of Soviet and German servicemen in some units, for example, in the Hans Beimler unit and in one of the Soviet tank regiments.

With the assistance of our brothers-in-arms, the officers and NCO's of the NPA Ground Forces training units and subunits studied the combat infantry vehicles (BMP); this made it possible to quickly master it after it was adopted. The "neighboring regiment's" best collectives and highly skilled specialists are passing on their rich experience in mastering the new artillery weapons and other combat equipment. This work is being organized in an especially skillful and purposeful manner in the August Bebel Tank Regiment, in the Hans Beimler and Otto Schlage units and in other units.

Combat cooperation is being developed between servicemen in GDR NPA Air Force and Air Defense Forces units and subunits and Soviet servicemen. The standards for combat training under complex conditions are being developed on a joint basis by GSFG and NPA air force subunits. Thanks to the competitions being conducted with experienced Soviet airmen, our pilots have achieved noticeable successes in combat training. The Herman Duncker missile unit is handling its missions in coordination with its Soviet brothers-in-arms in an exemplary manner. While visiting AF/AD units and subunits in September 1975, E. Honecker general secretary of the SED Central Committee and chairman of the GDR National Defense Council, rated their improvement in fighting power and combat readiness as living proof that the slogan "Learning from the Soviet Union means learning to win!" is continually becoming the main theme in daily army life.⁹

The increased demands on the navies of the socialist states in the Baltic Sea have enriched the content of the work on strengthening combat cooperation between the GDR People's Navy and the Twice Red Banner Baltic Fleet. As in the other services of the armed forces, cooperation is continually being developed in all spheres of naval life. The main attention is directed at conducting joint measures for combat training of strike forces and support forces. An exchange of work experience is conducted on a regular basis between radiomen, signalmen and other specialists.

The Soviet military delegation's visit to NPA units in April 1977 again very clearly demonstrated the enormous importance of the indestructible combat alliance with our Soviet brothers-in-arms. With a sense of profound satisfaction, our servicemen--in the Rudolph Hueptner Artillery Regiment, with the motorized riflemen and tankers of the Hans Beimler Regiment, at the Hermann Duncker AD missile unit, at the Hermann Matern Fighter Squadron and at other NPA units--told Mar SU D. F. Ustinov, USSR Minister

of Defense, and the other Soviet guests how the combat effectiveness of the NPA units and subunits is continually being improved thanks to the regular exchange of experience and coordinated combat training measures with the "neighboring regiments."¹⁰

With the development of combat cooperation between the GDR NPA and the Soviet Army, opportunities have expanded for making more efficient use of the achievements of science for the purpose of further increasing the combat readiness of the forces. This finds its expression in training NPA personnel in Soviet military educational institutions, conducting joint scientific measures and in intensive exchanges of delegations. NPA command personnel at all levels attend training at specialized courses on a regular basis and they participate in training demonstrations conducted by the Soviet Army. Joint lessons and research make it possible to develop unified views on the nature of possible wars and methods for waging them and a unified approach for comprehensive training of units and large units to defeat any aggressor.

The military literature placed at our disposal by the USSR plays a significant role in strengthening cooperation between the NPA and the Soviet Army. In 1975 alone, 30 Soviet works on the issues of military policy and military science were translated into German and published by the GDR Military Publishing House. We prepared and translated 1,582 publications from the Soviet Union's books and magazines.¹¹

Socialist competition is an expression of the constantly growing cooperation between the fraternal armies. For example, it was significant that, on the occasion of the famous dates--the 30th anniversary of our liberation from the fascist yoke and the 20th anniversary of the Warsaw Pact--it was conducted within the NPA for the 1974-75 training year under the motto "The soldier's slogan for 75--together with our brothers-in-arms, we are united, fit for combat and always combat ready." During "combat cooperation week" alone, tens of thousands of NPA and Soviet Army servicemen exchanged opinions on the problems of training and indoctrination; they conducted sports contests and competitions on individual aspects of combat training; and they conducted amateur concerts.

From the commander down to the young soldier, the meetings between NPA servicemen and our combat friends from the "neighboring regiment" have become a good tradition. As this unity becomes closer, the servicemen's increased political awareness will show itself more vividly. This found expression in the movement for a welcome worthy of the 60th anniversary of Great October. A battery from the Rudolph Hueptner unit

stepped forward as the initiator of socialist competition in honor of this celebration; from the very beginning, it firmly relied upon cooperation with a subunit from one of the GSFG units in its training. The battery's appeal to all NPA servicemen and military collectives on the occasion of the new 1976-77 training year stated: "We are guided in our actions by the fact that we are standing firmly and unanimously on the side of the Soviet Union in readiness to fulfill our military class duty shoulder to shoulder with the Soviet Army and the other fraternal armies."¹²

This appeal found very widespread support among the servicemen of the GDR and GSFG. During the past training year--which passed under the sign of the 60 anniversary of the Great October Socialist Revolution--NPA and GSFG military collectives conducted thousands of joint measures in which tens of thousands of servicemen of both armies participated. Here are some cases. In one of our military districts, 23 exhibitions of the achievements of military innovators were organized in 1977; 111 exhibits made by Soviet skilled craftsmen, as well as 39 joint works by our servicemen and Soviet servicemen, were shown at them. During a single training year, the library at the Karl Liebknecht Higher Officers School of the People's Navy issued 15,330 works of Soviet authors to readers. Writers such as K. Simonov, A. Chakovskiy, Ch. Aytmatov, V. Bykov, Yu. Bondarev and V. Karpov are among the most popular in the NPA. Members of the Air Force and Air Defense Forces Free German Youth Organization prepared personal gifts for their Soviet friends and presented them on 7 November--the day of the 60th anniversary of Great October.¹³

Along with our Soviet brothers-in-arms, the NPA servicemen and border forces stepped forward as the initiators of many other noteworthy undertakings directed at further increasing combat readiness and strengthening the armies of the socialist commonwealth countries. As ColGen G. Kessler, deputy GDR Minister of National Defense and chief of the NPA Main Staff, pointed out in his ADN interview which was devoted to the 60th anniversary of the Great October Socialist Revolution, the personnel of the NPA "fulfilled their combat and political training missions" in socialist competition "with a high level of efficiency and quality. Moreover, the process of achieving a greater degree of awareness of the need for unity and solidarity between the socialist armies, and primarily the need for further development of class and combat cooperation with the Soviet Army, is being successfully realized."¹⁴

The increased ability of NPA staffs and units to accomplish the missions facing them is the main criterion for the successful development of combat cooperation with the Soviet Army. NPA servicemen have demonstrated their combat capability and expertise on numerous occasions during the staff and field exercises which are conducted annually on a joint basis with GSFG servicemen. Moreover, unit combat readiness, the command and control skill of commanders and staffs and the combat expertise of personnel are tested on a systematic basis. A great deal of attention is devoted to the exchange of operations groups, communications personnel and communications equipment, as well as to the resubordination of units to the command element of the corresponding fraternal army during exercises. During the exercises, elements of modern combat were worked out, such as tactical airborne assault landings, forced crossing of wide water barriers, amphibious assault landings and defense against landing forces.

The exercise under the codename Oder-Neisse, which was conducted on the territory of the Polish People's Republic (September 1969), and Brothers-in-Arms (October 1970) were significant events in the development of the socialist defensive alliance. Units and staffs of all seven of the armies of the socialist defensive coalition participated in the Brothers-in-Arms exercise. "They were a serious test for the Combined Armed Forces and they clearly confirmed their high level of combat and political training. Personnel of the armies and navies demonstrated a superior level of combat training and expertise."¹⁵ The Shield-72 and Shield-76 exercises served to further strengthen the combat alliance. They demonstrated the allied armies high degree of unity "in their class nature, in their political missions, weapons and equipment, tactics and operational art, combat training, superior combat esprit of personnel and in firm socialist combat cooperation."¹⁶

The Friendship, Cooperation and Mutual Assistance Treaty which was concluded between the USSR and the GDR in October 1975 is a document of historic significance for the future intensification of combat cooperation. In connection with the signing of the new treaty, L. I. Brezhnev, general secretary of the CPSU Central Committee, stated that "its substance is the course for further drawing our countries and people together."¹⁷

On the basis of the treaty, combat cooperation between the NPA and the Soviet Army received further strengthening and development. Relationships with the "neighboring regiment"

have been enriched and intensified during recent years. At the same time, the practice of direct contacts between GDR workers and Soviet units and subunits is spreading. Joint sports and military political events and other multifaceted forms of cooperation promote a mutual convergence and they instill confidence in the mighty strength of the alliance with the USSR and its glorious Armed Forces.

In February 1976, 700,000 of the republic's young citizens took part in the events dedicated to "combat cooperation week"; 190,000 people visited Soviet Army and NPA museums and rooms of tradition and memorial sites of the antifascist Resistance Movement.¹⁸ Close, friendly contacts have been maintained over the course of several years between GDR universities, institutes and vocational-technical schools and GSFG subunits. A large number of students and employees are directly participating in the events for strengthening the class and combat alliance. The meetings with veterans of the Great Patriotic War are highly significant in international education.

Memoirs and publications of Soviet authors are appearing more and more; they present a deeply felt picture of the dedication, heroism and military expertise of the generation of Soviet people who brought freedom to the German people with their historic victory over fascism. Thus, the combat cooperation, indestructible unity and solidarity with the Soviet Army goes far beyond the bounds of the military sphere.

It was very clearly emphasized at both the 25th CPSU Congress and the 9th SED Congress: "During the past three decades, peace has been successfully preserved and the danger of war has been reduced; this was possible primarily due to the military power and peaceloving policy of the Soviet Union and the Warsaw Pact Organization."¹⁹

In his speech at the ceremonial meeting dedicated to the 60th anniversary of the Great October Socialist Revolution, Comrade L. I. Brezhnev, general secretary of the CPSU Central Committee and chairman of the USSR Supreme Soviet Presidium, stated: "The Soviet Union is efficiently taking care of its defense but it is not and will not strive for military superiority over any other country." He further emphasized that the Soviet Union is steadfastly and actively

in favor of a situation where "the argument between socialism and capitalism is decided in the sphere of peaceful labor and not on the field of battle and not on the assembly lines for weapons." 20

Today, the political military alliance of the Warsaw Pact members is a reliable bulwark for peace and progress. This confirms the historical conclusion that the socialist countries must continue to devote the necessary attention to developing their unified defensive organization and to strengthening the economic, political and combat cooperation between their people and armies.

The GDR servicemen and all the workers of our republic are profoundly convinced that only in unison with the Soviet Union and the Soviet Army is it possible to exercise political and military influence to curb imperialism and preserve peace throughout the world.

"Representing the main power of the Combined Armed Forces of the Warsaw Pact members and shoulder to shoulder with the GDR National People's Army and the other fraternal socialist armies," emphasized E. Honecker, general secretary of the SED Central Committee and chairman of the GDR State Council, "the servicemen of the Soviet Army are counterbalancing imperialism's military grouping on the European continent. They are making an important contribution to the cause of reliably defending the peaceful labor of the people of the socialist commonwealth countries. The class and combat alliance between the servicemen of the Soviet Army and the National People's Army is constantly growing stronger. The successes of the Soviet Army and its constant high level of combat readiness have become the standard for the National People's Army." 21

Everything possible is being done in the GDR to make use of the advantages of the socialist society to increase the country's defense capability. In accordance with the decisions of the 9th SED Congress, our party, our government and public organizations are devoting a great deal of attention to the country's defense. They are seeing to it that it will completely meet the missions facing it in defense of socialism's accomplishments at any time.

FOOTNOTES

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4. E. Honecker. "Speeches and Articles," vol. 1, Berlin, 1975, p 445.
5. NEUES DEUTSCHLAND, 12 April 1977, p 2.
6. VOLKSARMEE, Nr 37, 1970, p 3, Nr 43, p 2; NEUES DEUTSCHLAND, 19 October 1973, p 2, 20 October 1973, p 2.
7. MILITAERGESCHICHTE, vol 1, 1976, p 37 and following.
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9. NEUES DEUTSCHLAND, 12 September 1975, p 4
10. NEUES DEUTSCHLAND, 14 April 1977, p 2.
11. PARTEIARBEITER, April 1976 special volume, p 25.
12. VOLKSARMEE, Nr 45, 1976, p 4.
13. KRASNAYA ZVEZDA. 1 March 1978.
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18. "Die Jugend der DDR und ihr Grundgesetz" (GDR Youth and
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20. L. I. Brezhnev. "Great October and Mankind's Progress:
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DEVELOPMENT OF SOVIET MILITARY SCHOOL SYSTEM EXAMINED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 7, Jul 78
signed to press 22 Jun 78 pp 78-83

[Article by Maj Gen N. Kozlov, lecturer and candidate of historical sciences: "Scientific Reports and Information: The CPSU's Activities in Creating and Developing Soviet Military Schools"]

[Text] From the first days of the Red Army's development, the development of a new kind of army, V. I. Lenin and the Communist Party demonstrated indefatigable concern for building and strengthening its command personnel. "...In building a new army," V. I. Lenin stated, "we must only select commanders from the people. Only Red officers will have authority among the soldiers and only they will be able to consolidate socialism in our army. Such an army will be invincible."¹

Based on V. I. Lenin's instructions, the first Soviet military educational institution was opened in December 1917--the Moscow Revolutionary Machinegun School for Command Personnel (now the Higher Combined Arms Command School imeni the RSFSR Supreme Soviet). In February 1918, the People's Commissariat for Military Affairs issued an order to open the first 13 accelerated command courses.²

This laid the beginning for developing a network of Red Army military educational institutions for training command personnel from representatives of the workers.

V. I. Lenin and the Communist Party were also concerned about developing higher military educational institutions. The following case is extremely typical in this respect. After finding out about the attempt by the Directorate for Military Educational Institutions to eliminate the Nikolayevsk Military Academy in March 1918, V. I. Lenin categorically opposed it. As a result, a new Red Army academy--the General Staff Academy--was created on the basis of the old Nikolayevsk Academy in December 1918.³ Soon afterwards, the Artillery Military Engineering, Naval, Military

Medical and Military Supply academies began training personnel. In 1919, the Red Army Teachers Institute imeni N. G. Tolmachev was opened in Petrograd; it was later changed to the Military Political Academy imeni V. I. Lenin. In 1920, the Red Air Force Engineer Institute imeni N. Ye. Zhukovskiy was created on the basis of the Moscow Aviation Tekhnikum (presently, the Air Force Engineering Academy imeni N. Ye. Zhukovskiy).

The Eighth Congress of the Workers and Peasants Party (bol'shevik) played an enormous role in improving the training of military personnel. It adopted the party's new program which reinforced Lenin's instructions on training command personnel from "among the people" and it adopted a special decision on the military issue which delineated ways for further improving training, education and assignment of command personnel.

Due to the unremitting concern of the Communist Party and V. I. Lenin, the Red Army had eight higher military educational institutions and over 150 schools and courses of instruction by the end of 1920.⁴

Between 1918-1920, the courses of instruction and military schools for command personnel which were subordinate to the Main Directorate for Military Educational Institutions trained approximately 40,000 Red commanders; between 1918-1921, the military academies and higher military schools provided the army with 4,538 qualified commanders and chiefs. In addition, the field army's front, army and division courses of instruction trained approximately 25,000 commanders.⁵

Thus, during the Civil War and the military intervention, the party successfully solved a problem of unprecedented importance and complexity--the problem of creating army personnel for the socialist state.⁶

During the first years of socialist construction, the system of military educational institutions was organized on the basis of Party Central Committee and Soviet governmental decrees. Instead of short command courses of instruction, a broad network of standard military schools was created with three-four year terms of study.⁷

The reorganization of military educational institutions in the beginning of the 20's was an important step toward creating a new system for training army and navy personnel. In 1923, there were 55 standard schools, 13 command courses of instruction and 10 higher military educational institutions in the Workers and Peasants Red Army. In addition, 8 district and 5 national military political schools were created on the basis of the military political courses of instruction.⁸

A unified system for training all categories of proletarian command and political personnel was basically developed during the years of the military reform. A unified standard military school with a standard staff and syllabus for each branch arm was established to train company grade officers.

In 1927, because of the increased demands for political workers to have a knowledge of military affairs, the USSR Revolutionary Military Council established training at courses of instruction for political officers from among platoon commanders who had completed the standard military school. In the navy, company grade officers were trained at the Naval Political School and at Central Political Courses of Instruction.

Various courses of instruction with a nine month period of study were created for refresher training of command personnel.

During the years of the reform, the organizational structure of the higher military educational institutions was improved. In 1927, general and field grade officers of the army and navy were trained by six military academies, as well as the higher academic courses of instruction at these academies, by four higher schools and five military schools at civilian institutes.⁹

The reorganization of military educational institutions was accompanied by an improvement in the requirements for selecting students and cadets and for bringing the teaching complement up to strength, by an improvement in the educational process and party and political work and by an improvement in educational facilities. The measures taken by the party made it possible to eliminate the shortage of command personnel with a secondary and higher military education.

While strengthening and technically reequipping the army and navy during the years of the first five-year plans when the international situation had deteriorated and the threat of a military attack on our country had increased, the Communist Party showed its indefatigable concern for command and leadership personnel. The CPSU Central Committee decrees of 25 February 1929 and 5 June 1931 "On the Workers and Peasants Red Army Command and Political Personnel" directed attention to the need for further improving the special skills and political tempering of commanders, for strengthening the worker and party nucleus among their ranks and for improving the organization of all educational work in military schools.

In accordance with the increased requirements, the existing military educational institutions were expanded and reorganized and

new ones were created; they were called upon to provide command and political personnel for all branch arms. The network of higher military educational institutions increased by almost a factor of two.¹⁰ The military schools were reorganized as military schools with a 2-3 year period of study.

Up to the end of the 20's, military educational institutions primarily trained command personnel for the infantry and cavalry; now, the emphasis was on training pilots, tankers, artillerymen, signalmen, combat engineers and other specialists. During the first five-year plans, the overall number of aviation tank and other technical schools increased by a factor of six.¹¹ During a 12 year period (from 1925-1937), the military schools trained 135,000 commanders and the military academies trained approximately 13,000.¹² The educational level of command personnel underwent a sharp change. By the beginning of 1937, 79.6 percent of the commanders had a complete secondary and higher military education; this percentage reached 96.8 percent in the motorized and mechanized forces, 98.9 percent in the Air Force and 99.2 percent in the Navy.¹³

When the Second World War began and there was a real threat of a fascist invasion of our country, there was a requirement for a significant increase in the army and navy and for providing them with ideologically tempered commanders, political workers, engineers and technicians with a good knowledge of military affairs. New military educational institutions were formed and the existing ones were expanded. In 1940 alone, 42 new schools were created.

By the beginning of the war, there were 19 military academies, 10 military schools at civilian vuzes, 7 higher naval schools, 203 military schools and 68 refresher courses in the Armed Forces. The network of military political schools was significantly expanded. The number of them reached 26 by the beginning of 1941.¹⁴

The Soviet Union's Great Patriotic War against imperialism's shock forces was a serious task for the Soviet government and its Armed Forces. The sharp increase in the army during the first months of the war and the difficult, bloody struggle at the front caused an increased requirement for officer personnel on an enormous scale. The task of training, educating and correctly assigning them took on the utmost importance.

In accordance with the demands of wartime, the entire personnel training system was reorganized; the programs were revised, the period of training was decreased and the network and volume of educational institutions and officer courses were expanded. By the beginning of the third period of the war, 31 higher military

institutions, 220 military schools and over 200 different courses were training officer personnel.¹⁵ In 1941, the army and navy received 232,000 officers from military educational institutions; in 1942, they received over 564,000.¹⁶ By the end of 1942, the army and navy were no longer experiencing shortages in officer personnel. During the war, the military educational institutions graduated approximately 2 million officers.¹⁷

The Soviet officer corps withstood the severe trials on the fields of battle and the Soviet military schools proved their ability to provide the Armed Forces with well trained commanders, political workers and military specialists who were infinitely devoted to the motherland. The political maturity, basic military training and organizational abilities of command and leadership personnel were one of the most important reasons for the Soviet Armed Forces victory in single combat with fascism.

In the postwar years, the military personnel training system created by the Communist Party continued to develop and improve. The interests of the cause demanded not just a restoration of the prewar periods of instruction in academies and schools but an increase in them. A broad network of correspondence schools was developed for officers and generals.

Due to the radical technical changes which had taken place in military affairs and the unprecedented increase in requirements for military personnel during recent years, a number of important measures have been accomplished based on party and governmental decisions; these measures were directed at the further development of Soviet military schools and increasing the level of training for graduates of military educational institutions.

The CPSU Central Committee and the USSR Council of Ministers decrees "On Measures for Improving Specialist Training and Enhancing Management of Higher and Secondary Specialized Education in the Country" (1966) and "On Measures for Further Improving the Country's Higher Education" (1972); the CPSU Central Committee decrees "On Measures for Further Developing Social Sciences and Increasing Their Role in Building Communism" (1967) and "On the Work for Improving the Ideological and Theoretical Level of Instruction for the Social Sciences at the Moscow Higher Technical School imeni N. E. Bauman and the Saratov State University imeni N. G. Chernyshevskiy" (1974); as well as the "Legislative Principles of the USSR and the Union Republics on National Education" (1974) and others were very important. After pointing out the large amount of work which has been done in developing the higher schools, the 25th CPSU Congress also pointed out the need for further, serious improvement in the educational system. "This is especially important now," stated L. I. Brezhnev, "under the conditions of the scientific and technological revolution."¹⁸

The military educational institutions have been restructured, both organizationally and in the content of training and education. One of the typical features of the past 10-20 years has been the conversion of secondary military schools into higher schools. By the mid 70's, practically all the military schools were higher schools.¹⁹ The network of military engineering educational institutions was significantly expanded; this made it possible to increase the number and percentage of engineering and technical personnel in the Armed Forces. A number of new higher command, military political and engineering schools were opened.

The period of study, syllabus and programs were revised in all the military educational institutions for the purpose of bringing the military school system into line with the mission of the Armed Forces and with contemporary requirements for officer personnel.

The attention paid to teaching personnel has increased--their training, education, increased scientific qualifications and teaching expertise, selection based on political and professional qualities and the correct combination of scholars of the older generation and young specialists. The number of teachers with scholarly degrees and titles in higher military educational institutions has increased from year to year. The CPSU Central Committee and the USSR Council of Ministers decree "On Measures for Further Improving the Certification of Scientific and Scientific Teaching Personnel" (1974) increased the responsibility of postgraduate students and scientific councils for the quality of work on dissertations.

Considering the fact that the accomplishment of the mission of the higher military educational institutions is greatly dependent upon who attends them, the CPSU demands that concern be shown "for supplying the military educational institutions with the best part of the young people."²⁰

In selecting personnel for educational institutions, a great deal of attention is devoted to getting more first term servicemen into the cadet ranks. During recent years, their percentage has significantly increased. The number of warrant officers among them has noticeably increased.²¹

The requirements for staffing military academies have increased. The majority of the officers selected for them have significant service experience among the troops and they have decorations for outstanding results in combat and political training.

During the contemporary stage of the Armed Forces development, a lot is being done to develop educational facilities for the higher military educational institutions. Specialized classes

and laboratories are being improved and new ones are being created; they are equipped with the latest equipment, instruments and plant, simulators, working models and combat equipment and arms. A great deal of attention is devoted to the creation of training centers; the latest achievements of cybernetics, automation, electronics and television are used to equip them.

In accordance with the requirements of the CPSU, intense work is being conducted in the higher military educational institutions to improve the training, education and all-round development of specialists with firm ideological convictions. The motto of the Tenth-Five Year Plan--efficiency and quality--has become the motto of all the employees of higher military educational institutions.

Along with the study of the history of the CPSU, Marxist-Leninist philosophy and political economy, the teaching of the principles of scientific communism was introduced in the academies and higher schools with the 1963-64 school year. The state examination on one of the social science disciplines is now conducted in all the higher military educational institutions, including the engineering academies, the engineering schools of academies and the higher engineering schools.

The subject plans and programs in the social sciences are orienting students and cadets to the creative study of the classic works of Marxism-Leninism, the CPSU documents, the international communist movement and the reports and speeches of L. I. Brezhnev and other party and governmental leaders. Social sciences instruction has begun to be conducted in closer contact with the practical experience of building communism and with the life and mission of the Armed Forces. Well-reasoned criticism of bourgeois ideology, reformism and revisionism has increased.

Operational and tactical training occupies an important place in the syllabus of academies and schools. The graduate of any higher military educational institution must know the basic principles of Soviet military doctrine and the nature of modern combat and operations; he must possess specific skills for organizing and conducting combat operations. As far as the command higher military educational institutions go, the operational and tactical disciplines are the basis for forming commanders and battle managers here. The attention paid to the level of land, air and sea training and the practical training of students and cadets has increased. A great deal of attention is being devoted to the study of the military historical heritage of the classics of Marxism-Leninism, the activity of the CPSU in organizing the defense of the socialist fatherland and the very rich combat experience of the Great Patriotic War; a great deal of attention is also being devoted to expanding and deepening knowledge in the area of the natural and technical sciences as well as forming superior

morale, political and psychological qualities, and an in-depth understanding of their patriotic and international duty in students based on the examples of the historic history of our people and its Armed Forces.

The requirement of the 25th CPSU Congress to teach students to acquire knowledge independently and orient themselves in the swift flow of scientific and technical information has been placed in the center of attention for teacher collectives.²²

Drawing students and cadets into scientific research work has become an integral part of the training for highly skilled military personnel and for stimulating their independent work. In many academies and higher military schools, the majority of them are members of military scientific societies. For example, scientific groups encompass over 80 percent of the students at the Military Political Academy imeni V. I. Lenin.

During recent years, the educational level of officer personnel has increased significantly. Every fourth officer had a higher military or specialized education 10-12 years ago;²³ now, every second officer does.²⁴ Almost 100 percent of the brigade and higher commanders and over 90 percent of the regimental commanders have acquired a higher military education. All the chiefs of political agencies and four-fifths of the political workers of the regimental staff have a higher education.²⁵

During the period of time which separates us from the October night when the shot from the legendary Aurora proclaimed the beginning of a new era, our country has traveled a route equal to a century. "...Socialism," the CPSU Central Committee decree "On the 60th Anniversary of the Great October Socialist Revolution" emphasizes, "ensured rates of progress for all aspects of society's life which were unprecedented in history."²⁶ The Armed Forces and their educational institutions have undergone a qualitative change. The military academies and military schools are now successfully accomplishing the mission of training highly skilled commanders, political workers, engineers and other military specialists who are endlessly devoted to the motherland and the party and who are responsive to the contemporary stage of development for the Armed Forces. As Comrade L. I. Brezhnev said, our motherland now "has the necessary amount²⁷ of the best military personnel in the world at its disposal."

FOOTNOTES

1. V. I. Lenin. "Poln. sobr. soch." (Complete Collected Works), vol 37, p 200.

2. "50 let Vooruzhennykh Sil SSSR" (50 Years of the USSR Armed Forces), Voenizdat, 1968, p 38.
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24. See KOMMUNIST, No 3, 1977, p 14.
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WARTIME DEVELOPMENT OF THE CHEMICAL SERVICE RELATED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 7, Jul 78
signed to press 22 Jun 78 pp 87-95

[Article by Maj Gen Tech Trps (Ret) A. Babushkin, lecturer
and candidate of military sciences: "Improving the Chemical
Service During the War"]

[Text] The Soviet Army's Chemical Service was created in the
summer of 1918. This was a necessary and unwilling measure
taken by the Soviet government to ward off the threat of chemical
warfare being unleashed against the young Soviet republic by
the White guards and the interventionists--there had already
been cases where the counterrevolutionaries had used chemical
agents against Red Army units on the Northern Front.¹

Organizing troop defense against gas attacks became the main
mission of the Chemical Service.

The Chemical Service was continually developed and improved
after the Civil War. In evaluating its overall status, K. Ye.
Voroshilov pointed out: "We can say that we will not be
defenseless when faced by chemical weapons. We will be able
to protect our forces from a chemical attack."²

On 22 June 1941, fascist Germany attacked our country. In the
very beginning of the war, a number of cases became known where
fascist Germany was preparing to use chemical weapons against
the Soviet Army and the Soviet Union's civilians. On 15 July,
our forces seized secret documents and chemical equipment of
the 2nd Battalion of the enemy's 52nd Chemical Mortar Regiment
in the battles to the west of Siten' (to the east of Pskov).
These inscriptions were on one of the packages: "Mobilization
Documents," "Don't allow to fall into enemy hands," "Open
only on receipt of the command 'Indanthrene' from the staff of
the High Command."³ The secret instruction ND No 199 "Firing
Chemical Projectiles and Mortars," which was issued in 1940, and
secret supplements to it, which were sent to the forces on

11 June 1941 just before the beginning of the war against the USSR, were also among the captured documents. They contained thoroughly developed instructions on the procedures and tactics for employing chemical agents. In addition, the supplement to the instruction pointed out that the chemical forces would receive new, 10 cm model "40" and model "d" mortars as well as new chemical mortar shells with various powerful chemical agents.⁴ At this point, it should be emphasized that chemical agents were a weapon of the Wehrmacht High Command and they were to be employed on the basis of surprise and in a massed manner at its command.

It was subsequently discovered that Halder, the chief of the General Staff for fascist Germany's Army, reported on 25 March 1941: "By 1 June, we will have 2 million chemical shells for light field howitzers and 500,000 shells for heavy field howitzers. There is a sufficient number of fillers of different identifying colors for chemical warfare. It is only necessary to fill the shells with them and the order has been given for this. Up to 1 June, the chemical munition warehouses can load six convoys with chemical ammunition per day and they can load 10 convoys per day after 1 June. To speed up delivery, 3 convoys of chemical ammunition will be delivered to the logistics units of each army group along alternate routes..."⁵

All of this proves that German fascism was ready to employ chemical agents.

With this information at his disposal, I. V. Stalin, the People's Commissar for Defense, pointed out in his order in mid-August 1941: "The contemptuous, cold-blooded German fascists are intensively preparing to employ chemical agents against the Red Army. By employing this monstrous weapon, they intend to take us by surprise, cause confusion and, thereby, break the stubborn resistance of our units..."

To protect Soviet Forces from chemical agents, I. V. Stalin demanded that "the chemical defense service be made a part of force combat employment and that the depreciation of the danger of a chemical attack be stopped in the most decisive manner..." The fact that well trained chemical defense subunits of divisions and regiments, as well as chemical service officers, were not being used for their assigned purpose was proof that this danger was underrated. The chemical troops from the chemical defense platoons of regiments and companies of divisions were taken to reinforce infantry subunits. And they were used to pull commandant duties. The motor vehicles equipped for decontamination duties were taken from chemical subunits on numerous occasions. The chemical service chiefs, mainly at the regimental-corps echelon, frequently replaced subunit and unit commanders who had become casualties and they acted as staff officers.

The same order demanded: "Eliminate the irresponsible attitude toward retention of chemical equipment. Write off worn out equipment in acts signed by the division commander and commissar and approved by the chief of the front's chemical directorate." This significantly increased the responsibility of large unit and unit commanders and chemical service chiefs for the care of chemical defense equipment.

Several changes also took place in the organization of the Chemical Service and in the Chemical Defense Forces. Thus, in September 1941, the Military Chemical Defense Directorate was changed to the Main Military Chemical Directorate (MMCD) and the chemical departments of a number of fronts were changed to military chemical directorates. Considering the fact that the main mission of the chemical defense subunits of infantry regiments and divisions was to organize chemical defense for the troops, they received the appropriate titles: the infantry regiment's chemical defense platoon was called the chemical defense platoon and the infantry division's decontamination company was called the independent chemical defense company. The decontamination battalions of the RHC (Reserves, High Command) were reorganized into independent chemical defense battalions (ICDB).

The chemical departments of the armies were also strengthened. A chemical weapons engineer and an assistant department chief for operational reconnaissance were added to their TO and E.

Political workers and party organizations developed a great deal of educational work among personnel; during this work, an even greater hatred of Hitler's invaders, who were preparing for chemical warfare, took root; the reliability of our chemical defense equipment was explained in the press and demonstrated in practice; special leaflets were published for the servicemen. Lessons for studying the methods and rules for using individual protective equipment and individual weapon decontamination equipment were organized among the fighting forces who were on the defense and among large units and units of the second echelon and reserve. Measures directed at increasing the qualifications of chemical service officers were also taken (courses of instruction and special lessons).

In May 1942, the Soviet Army MMCD published a "Provisional Manual on Chemical Reconnaissance." It not only set forth the issues of conducting chemical reconnaissance but it also provided instructions on measures for warning the troops of a surprise enemy chemical attack and for timely use of protective equipment. This important document was used by all officers of the Chemical Service from the summer of 1942 until the end of the war.

Constant chemical observation was conducted in units and subunits during combat, especially in defense. It was not only accomplished by chemical troop observers but also by combined arms and artillery observers. For example, combined arms chemical reconnaissance reinforced by groups of chemical troops was conducted to a depth of 15 km during the defensive battles at Stalingrad. Reliable observation and warning were organized. Specifically, 50 forward and 14 rear chemical observation posts equipped with detection and alarm equipment were set up in the 21st Army of the Stalingrad Front.⁶

Special signals and procedures for warning our forces in the event chemical weapons were employed by the Hitlerites were provided in the plans and networks for organizing communications.

In mid-August 1942, the order of the People's Commissar for Defense, which implemented the "Provisional Manual for Ensuring Troop Chemical Defense by Red Army Services," was of enormous importance for the further development of troop chemical defense. The manual defined the duties and specific missions for ensuring troop chemical defense not just for the Chemical service but also for the Medical and Veterinary services.

The Chemical Service was assigned the mission to train troops in the rules for using individual and collective chemical defense, decontamination and chemical agent detection equipment; warning the troops on preparations for and the beginning of an enemy chemical attack; conducting terrain and weather reconnaissance; and finding local equipment suitable for chemical defense. In eliminating the aftereffects of an enemy chemical attack, the Chemical Service had to decontaminate weapons, combat equipment, contaminated terrain, uniforms and personal equipment.

The Medical and Veterinary services of the Soviet Army were concerned with supplying and training the troops to use individual chemical first aid kits (ICFAK) and special first aid kits for horses and war dogs; chemical reconnaissance of sources of water, food and fodder, organizing their decontamination and preparing them for subsequent use; and the complete personal CW cleansing of people and veterinary cleansing of animals contaminated by persistent chemical agents.

Thus, the first period of the war was characterized by a significant increase in the attention paid to the issues of chemical defense and by the accomplishment of large organizational changes in the Soviet Army Chemical Service. The methods for organizing chemical defense were carried out in accordance with the conditions of the specific situation.

Educational and explanatory work took on special significance; it was directed at increasing chemical discipline among the troops and at eliminating the careless attitude toward, and depreciation of, the danger of a chemical attack.

During the second period of the Great Patriotic War, the activities of the Chemical Service and chemical defense subunits and units were conducted in a situation which differed from the conditions of the first period. This was primarily explained by the fact that the defeats, which were suffered one after the other by the enemy forces on the Soviet-German Front after their encirclement at Stalingrad, led to an even greater danger that fascist Germany would unleash chemical warfare. Moreover, this danger was especially valid after the defeat of enemy forces at Kursk. Intelligence information from all the services provided evidence of the fascist German command's sharply increased activity in conducting chemical defense measures and preparations for the employment of chemical agents. New gas masks and chemical reconnaissance gear were delivered to enemy forces. It should also be pointed out that the offensive became the main type of combat operation for Soviet forces during this period of the war. Therefore, all chemical defense measures had to be directed at supporting offensive combat.

Although the Soviet Army's chemical defense was greatly improved by the end of 1942 in comparison with 1941 and the first six months of 1942, there were still a number of shortcomings in it. Thus, as before, individual commanders continued to depreciate the danger of the enemy's use of chemical weapons. They remained aloof from the management of chemical defense by shifting it to the chiefs of the chemical service. Troop training in chemical defense and exercises in gas masks for an extended period during combat duties were conducted on an irregular basis. There were losses of chemical equipment, especially in offensive battles. Because of this, the People's Commissar for Defense issued Order No 023 on 11 January 1943; It stated: "For each case of damage, loss and failure to take measures to protect chemical equipment, punish the guilty parties right up to a trial by a military tribunal."

This decisive requirement significantly decreased the losses of gas masks and it promoted an increase in troop readiness for chemical defense.

In 1943, the Red Army Field Manual (FM-43) was published; it very clearly set forth the issues of troop chemical defense in case the enemy began to use chemical weapons.⁷

Chemical reconnaissance began to be conducted on a more active basis. Its main missions boiled down to the following: finding

the enemy's chemical assault units in front of our forces front lines; seizing models of chemical ammunition, new chemical defense equipment and operational documents for a chemical attack. The most important methods for chemical reconnaissance were: chemical observation by the men and equipment of chemical subunits supplemented by combined arms and artillery observers; including chemical reconnaissance scouts in the combined arms reconnaissance groups and detachments when conducting combat reconnaissance; interrogating prisoners and defectors, especially chemical troops, artillerymen and pilots; and questioning local residents.

Chemical reconnaissance began to handle its assigned missions more successfully. Sometimes it acquired information on the enemy's chemical weapons even before it was received by his forces. The seizure of the German manual ND-935-11a 1943 with a description of a new chemical reconnaissance instrument is an example of this.⁸

Before the battle for the Kursk salient began in the summer of 1943, the Supreme High Command--in its 7 June 1943 directive which was signed by I. V. Stalin and A. M. Vasil'yevskiy--warned our forces about the real threat that the Hitlerites would employ chemical weapons. It specifically stated: "The Hq, SHC has information at its disposal that the German Command has recently increased its preparations for its forces to employ offensive chemical weapons... There are enough gamblers within the German command who, while counting on taking us by surprise, could decide to take a reckless gamble and employ offensive chemical weapons against us."

The situation which had developed made it mandatory for the Soviet Army Chemical Service and the Chemical Defense Troops to direct all their efforts at preventing the surprise use of chemical weapons by the fascist German Command and to completely prepare our forces for chemical defense. Work for training personnel in chemical defense was developed within units and large units. During this work, the main attention was directed at the practical use of individual protective equipment and at developing skills in decontaminating weapons and equipment. These lessons were usually conducted in rear areas and they ended with an exposure to chloropicrin in gas chambers (tents).

Officer personnel of combined arms units and large units studied the enemy's chemical assault equipment and learned how to control units (subunits) under conditions of the enemy's widespread employment of chemical weapons. The best trained chiefs of the chemical service conducted the lessons with them. In their turn, the officers of the Chemical Service and chemical defense units were trained according to a 200-300 hour program approved by the MMCD.

Based on instructions from the Hq, SHC in 1943, the practice of using gas masks while accomplishing combat duties was continued. Gas mask exercises were conducted on a daily basis in each unit (enterprise); these exercises were based on plans developed by the chief of the chemical service and approved by the unit commander or chief of staff. During these exercises, special attention was directed at training the new troop reinforcements.

For example, during the Battle for Kursk, the forces of the Steppe Front (the 7th Guards Army and the 53rd and 57th armies) brought the uninterrupted length of time spent in gas masks up to 8 hours by 1 September 1943.⁹

The Hq, SHC Directive of 7 June 1943 also established new procedures for providing the troops with gas masks. To reduce the losses of individual protective equipment, the gas masks were only issued in defense and only to personnel of first echelon units. Before an attack, they were turned in to the battalion field supply points and they were transported behind the advancing forces. Each infantry battalion field supply point had three horse-drawn wagons put at its disposal to transport the gas masks. The battalion (artillery battalion, cavalry squadron) chemical instructors received the gas masks from the subunits, delivered them to the battalion points and subsequently issued them during the transition to the defense. However, practical experience showed this method of transporting gas masks had a serious shortcoming. The fact of the matter was that the horse-drawn transport allocated for this purpose was frequently used to deliver ammunition. This led to a situation where the individual protective equipment lagged behind the troops. At the initiative of the chiefs of chemical service, regimental "joint detachments"¹⁰ began to be formed in chemical defense subunits to transport chemical equipment in October 1943. Due to this, the losses of gas masks significantly decreased. For example, on the Western and Southwestern fronts, gas mask losses decreased from 20 per day to 20 per month (in an infantry division). At the same time, this guaranteed the immediate issue of gas masks to personnel upon receiving the very first information on the danger of a chemical attack by the enemy.

It should also be pointed out that, based on instructions of the MMCD, simplified decontamination equipment began to enter service with the troops in the beginning of 1943. This was caused by the fact that industry could not completely satisfy the requirements for authorized equipment. Equipment manufactured by plants was mainly put into service with the independent chemical defense battalions.

Transportable decontamination units (DK-OS) were introduced into the chemical defense companies of infantry divisions to

decontaminate uniforms and personal equipment; they consisted of two collapsible, hot air decontamination chambers, one collapsible chamber with a source of steam and two containers for decontamination by the steam ammonia method without a special source of steam. For the purpose of free-flowing terrain decontamination, a suspended terrain decontamination device (PDM-2) was introduced in the division chemical defense companies; its hopper was attached to a truck in place of the bed and the spraying mechanism was put into operation by a drive shaft from the vehicle's rear wheels.

A group decontamination unit (GDK) was adopted in infantry subunits to decontaminate weapons; it consisted of a plywood box, six 0.5 l. bottles, each with a liquid decontaminant, and 3-5 kg of oakum (cotton rags). The single stage decontamination of weapons and combat equipment was thereby introduced into infantry companies in place of the two-stage decontamination (preliminary decontamination in combat formations and complete decontamination at special decontamination sites). This measure was extremely efficient since it simplified and sped up the process of decontaminating weapons among the troops.¹¹

Taking into account the fact that mustard gas made three-fourths of the chemical agents on hand in the fascist army, so-called mustard gas decontamination (special skin cleansing for soldiers contaminated by droplets of mustard gas) began to be conducted among the troops in 1943 for educational purposes; this was required to: familiarize all personnel with combat mustard gas (its external appearance, smell and toxic properties); to actually develop decontamination methods against this chemical agent on a person's skin and uniform with various decontaminants, solvents and improvised materials; and to instill confidence in servicemen that the ICFAK as well as the other decontaminants (solvents) were reliable means for cleaning the contaminated part of the skin. The mustard gas decontamination was conducted under the leadership of chemical and medical service officers. The results were completely satisfactory. Thus, of the 40,000 EM and officers who underwent the mustard gas decontamination in the winter and spring of 1943 in the 4th Shock Army of the Kalinin Front, only 35 men had a slight reddening of the skin. It is difficult to overstate the practical significance of this measure. After it was conducted in many large units and received positive results, the Red Army MMCD made it mandatory to do this in all the forces with its directive in the beginning of December 1943.¹²

In the first half of 1943, a significant amount of work was also conducted upon preparing positions for chemical defense among the troops in defense. Shelters with industrially-built TO and E air filtration plants in them were built at command and observation points and at operational hospitals and medical points. Deflectors

and awnings were built above foxholes and trenches for protection against the spray of chemical agent droplets. In addition, shelters were built in infantry companies (artillery batteries); air filtration plants made from make-shift equipment were installed in them. The example of the 4th Shock Army of the Kalinin Front--which has already been mentioned--was typical in this respect. Based on the order of LtGen V. V. Kurasov, the formation commander, the engineering and chemical subunits built standard shelters for companies, command posts, observation posts and medical aid stations in the area of the course of instruction which was conducted for all the army's command personnel in the beginning of the winter of 1942-43. After the course of instruction, the preparation of similar shelters began at all the army's positions, command posts, observation posts and medical aid stations based on the commander's order.

In the second period of the war a great deal of attention was also devoted to organizing chemical defense in the rear service units and enterprises of the fronts and armies. In connection with this, the positions of chiefs of the chemical service for the rear services of the front and army were introduced in April 1943. In executing their official duties, they were guided by the "Regulations on the Duties of the Chief of the Chemical Service for the Rear Services of the Front (Army)" of 2 April 1943¹³ and by the "Provisional Manual for Organizing Chemical Defense for Rear Services Facilities," which was signed in December 1943 by the chief of the MMCD and the deputy chief of the Soviet Army Rear Services.¹⁴

Thus, during the second period of the Great Patriotic War, the activity of the Chemical Service consisted primarily of ensuring a higher level of readiness for chemical defense among the forces and logistics units while the Soviet Army was going over to a strategic offensive.

The third period of the Great Patriotic War was not only characterized by the swift offensive operations of our forces, which resulted in the enemy being driven beyond the borders of Soviet land, but also by the fact that military operations were carried to the territory of fascist Germany and its satellites. Therefore, the obvious inevitability of the total defeat of Hitler's army made the danger of chemical warfare being unleashed even greater. Any gamble could be expected from the mortally wounded fascist beast. The Hitlerites were ready to employ any means to postpone the hour of their downfall.

All of this set the task for the Chemical Service to ensure constant readiness of Soviet forces to repel a chemical attack on the part of fascist Germany.

During the third period of the war, the centralization of the planning and management of all chemical defense measures conducted among the troops was the distinguishing organizational feature of the Chemical Service.

As before, primary importance was attached to chemical reconnaissance; new missions arose for it, which were connected with the arrival of our forces in areas occupied by the Hitlerites for a long time. Its missions not only consisted of discovering the level of the enemy's preparations for employing chemical weapons but also of establishing the level of development and trends in the production activity of his chemical and military chemical industries and the status of his scientific and technological facilities. In addition, it had to verify the accuracy of the data on the enemy's preparations for employing chemical agents, which were received earlier.

Special reconnaissance groups created from chemical service subunits and units (ICDC, ICDB) conducted reconnaissance of liberated or occupied territory by inspecting the terrain and important facilities.

Chemical defense was planned for a battle, an operation and, during pauses in operations, for a period of time established by the command element. The chemical directorates of the fronts usually planned chemical reconnaissance for a month and the chemical departments of armies usually planned it for a 10-15 day period.¹⁵

A separate chemical reconnaissance plan was not developed in large units and units but its missions were included in the general chemical defense plan.

A great deal of attention was devoted to chemical defense training for the troops which was conducted during pauses in operations. A characteristic feature was that it was not just limited to individual training for personnel but it also pursued the goal of inspecting fulfillment of measures according to the unit (large unit) chemical defense plan. This inspection was usually conducted in the form of a surprise announcement of a chemical training alert which was conducted, as a rule, according to the plans of the army and front staffs and it was not only a surprise for the unit personnel but also for the chiefs of the chemical service. Sometimes, these inspections were conducted on an army-wide scale and even a front-wide scale by a decision of the appropriate military councils. Thus, for example, a chemical alert was declared for the forces of the First Ukrainian Front on 16 October 1944. Only the command

element, the front staff and the people who were earmarked to inspect the actions of the troops knew that it was a training alert. Therefore, all the measures among troops were conducted without making any previous arrangements. The inspection showed that the forces of the front were basically prepared for defense against a possible chemical attack within 4-5 hours after receiving the warning on the "danger of a chemical attack." The efforts of the command element and the chemical service were subsequently directed at decreasing these time periods.

During the final offensive operations conducted by other fronts, personnel always had their individual protective gear ready.

During the third period of the war, the special features of organizing chemical defense were caused by the appearance of a number of changes in the system for supplying troops with chemical equipment. They were directed at reorienting the entire supply system under the conditions of the widespread and rapid offensive operations of our forces. The experience in organizing the supply of chemical equipment for the troops revealed the need to transfer these functions from the military technical supply service to the direct management of the Chemical Service. This led to reestablishing the position of division assistant chief of chemical service for supply in March 1944; the "joint detachments," which were created in 1943 to protect and transport protective equipment, were subordinate to him. In addition, the army chemical warehouses were also made independent organizations in 1944.

It can be seen from the above that the Soviet Army Chemical Service became an integral part of troop combat support during the third period of the war. At the same time, the troop chemical defense organization approximated the conditions for waging war with the employment of chemical weapons.

During the war against imperialist Japan, full use was made of the rich experience accumulated by the Chemical Service in organizing troop chemical defense in the Great Patriotic War.

For a period of many years, the Japanese militarists were also persistently preparing to employ chemical and biological weapons against the Soviet Army and the people of the USSR. They even used them in the war with China.

Therefore, the Soviet Command attached a great deal of significance to ensuring constant readiness of the troops for

chemical defense and it prevented the possibility of a surprise chemical attack. When compared to the Soviet-German Front, there were no basic differences in the organization of troop chemical defense in the war against imperialist Japan but there were some special features.

First, the number of chemical defense battalions within the front was significantly reduced. Instead of the 6-8 battalions in the 1945 operations on the Soviet-German Front, there were 1-2 battalions in the fronts in the Far East. In turn, this led to an increase in the personnel strength of chemical defense platoons and chemical defense companies by almost a factor of two at the expense of combined arms subunits.

The second special feature was that, due to the significant distance between the armies' zones of advance (especially in the Transbaykal and the Second Far East Front), permanent representatives of the chemical directorates of the fronts exercised direct supervision over their chemical departments when operations were being prepared and conducted.

Overall, the Chemical Service was continually improved during the Great Patriotic War. It conducted an enormous amount of work directed at preventing the death of tens of millions of Soviet people in the event the Hitlerites or the Japanese militarists unleashed chemical warfare.

It is now known for a fact that one of the primary factors which made it impossible for the Hitlerites to unleash chemical warfare was the Soviet forces high level of readiness for chemical defense; this readiness did not give the fascist German Command any hope for a surprise attack and the massed employment of chemical agents. The experience of the Chemical Service during the war was unique since, fortunately, chemical defense did not receive the test of combat. Nevertheless, it was a service which actually functioned and organized and conducted the necessary measures. Its main missions were to warn its forces about the danger of a chemical attack and to protect them from chemical agents

Practice showed that direct chemical reconnaissance of the opposing enemy was the most important type of chemical reconnaissance. Terrain and weather reconnaissance were conducted on limited scales. To receive the most complete and objective chemical warfare information on the enemy, the data from chemical reconnaissance must be closely fused with data from tactical, operational and strategic intelligence.

The most efficient methods of chemical reconnaissance were: special chemical observation, combat reconnaissance and the study of documents, models of armament and protective equipment seized from the enemy.

The Great Patriotic War revealed the need for improving the means for conducting chemical reconnaissance and the system for warning the troops of the danger of a chemical attack. It demonstrated the enormous importance of a high level of chemical discipline in the business of chemical defense. Experience shows that an insistence on high standards and the personal example of representatives of the Chemical Service were the most important conditions for maintaining firm chemical discipline, safeguarding protective equipment and confirming the authority of the Chemical Service.

An exceptionally important role was allotted to party political work. It was directed at increasing the troops vigilance and readiness for a possible chemical attack by the enemy. Political agencies, party and Komsomol organizations explained the contents of directives and orders from the SHC; they made each serviceman aware of the requirements of these documents.

FOOTNOTES

1. Central State Archives of the Soviet Army, f. 3036, op. 1, d. 14, l. 1; f. 188, op. 4, d. 421, l. 22; f. 105, op. 1, d. 70, l. 284.
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6. M. V. Krasil'nikov and G. I. Petrov, "Istoriya khimicheskoy sluzhbyi voysk khimicheskoy zashchity Sovetskoy Armii" (History of the Soviet Army Chemical Service and Chemical Defense Troops), Moscow, izd. VAKHZ, 1958, p 116.
7. "Red Army Field Manual," Moscow, 1943, pp 139-145.
8. M. V. Krasil'nikov and G. I. Petrov. op. cit., p 139.
9. USSR Ministry of Defense Central Archives, f. 236, op. 2765, d. 8, ll. 8-11, 49-60.

10. Ibid., ll. 8-11, 120-127.
11. Ibid., f. 236, op. 2765, d. 2, ll. 80-81, 92, 130-131.
12. Ibid., f. 236, op. 2765, d. 5, l. 100.
13. Ibid., f. 236, op. 2765, d. 3, l. 7.
14. Ibid., d. 9, ll. 78-85.
15. M. V. Krasil'nikov and G. I. Petrov. op. cit., p. 176

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NAVAL TRAINING AND RELATED ACTIVITIES

Chief of Main Naval Staff Interviewed

Moscow VOYENNIYE ZNANIYA in Russian No 7, Jul 78 signed to press
7 Jun 78 pp 2-3

[Text] Admiral of the Fleet G. M. Yegorov, Chief of the Main Naval Staff of the USSR, belongs to that generation of Soviet seamen, tempered by service in Osoaviakhim [Society for Assistance to the Defense, Aviation, and Chemical Construction of the USSR], who came to naval service with Komsomol authorization. Completing his naval schooling before the Great Patriotic War, served aboard submarines from the first day of the war to the last. He served as navigator and executive officer of the Red Banner submarine "Shch-310" of the Red Banner Baltic Fleet and participated in naval combat operations. In the post-war period he has commanded ships, forces (soyedineniye), and the Red Banner Northern Fleet. On the occasion of Navy Day, the admiral met with our correspondent, Captain 1st Rank (Res) V. Nikolayev, and responded to his questions.

Question: Georgiy Mikhaylovich, let us begin with a traditional question. What successes do navy personnel have behind them as their special day approaches?

Answer: The seamen of our fleets, the Caspian Flotilla, and the Leningrad VMB [Naval Base] are saluting Navy Day with new successes in accomplishing the tasks involved in defending our great motherland, tasks assigned us by the 25th Congress of the CPSU.

Thanks to the constant concern of the CC CPSU, the Soviet Government, and Comrade L. I. Brezhnev himself for increasing the defensive strength of our motherland, the Soviet Navy now has at its disposal first-rate submarines, which constitute the basic component of our ocean-going fleet, up-to-date vessels for its surface fleet, ocean-going naval aviation, the latest weapons, and a variety of radio-electronic equipment. Our seamen have successfully mastered navigation and have learned to execute military training missions in virtually all regions of the world ocean.

Our fleet personnel were greatly inspired by Comrade L. I. Brezhnev's visit this past April to areas of Siberia, the Far East, and the Red Banner Pacific Fleet. Pacific Fleet personnel and all seamen have taken as an order words he spoke during the meeting: "The glory of Soviet seamen is undying. So be true to it in the future as well! Improve your mastery of military skills and your level of combat training; improve your political training; carry with honor the banner of the Soviet Armed Forces!"

There can be no doubting that Soviet seamen will respond to the paternal concern shown by the Communist Party and the Soviet Government for the Navy with further success in their military and political training and stronger discipline and organization.

Question: Your entire life has been bound up with the Navy. Yours has been a grand career, from cadet to admiral of the fleet and chief of the main naval staff. Your position is an extraordinarily responsible and, surely, a very burdensome one. Do you not regret that you chose this career? Incidentally, how did you become a seaman? What did you do before you began your service in the Navy?

Answer: I spent my younger years in work and training among the Komsomol members of the 1920's and 1930's. Life in Leningrad, near the sea, and training in the circles and clubs of Osoaviakhim gave rise within me, as well as other people my age, to a burning desire for military service. In these years virtually every young man dreamed of becoming an aviator or a seaman, and when at the beginning of the 1930's the Komsomol called on young people to serve in aviation or the navy I decided to enter a naval school, although I had already completed my tekhnikum and was working in a plant. At that time there were two naval schools in Leningrad: the command school imeni M. V. Frunze and the engineering school imeni F. E. Dzerzhinskiy. I immediately passed examinations for both of them. The competition was intense, 12-14 people for one place. After passing these difficult tests, I was enrolled as a cadet in the Navy School imeni M. V. Frunze, which was for me, despite of the difficulties of naval service, a source of great happiness and confidence since the earliest days of my career. Since then I have served over 40 years in the navy.

In the school we studied navigation, astronomy, ship theory, all types of weapons and the tactics of their use, and many other subjects. On training cruises at sea we passed through all phases of training--from galley worker and stoker (we sailed on coal ships back then) to gunlayer and torpedoman, navigator, and then, in the final course, watch officer. And when at the end of my training it was suggested that I settle on a specialty I chose the occupation of submarine navigator. After I completed my schooling I had to go to war in the Baltic Fleet as navigator and executive officer of the submarine "Shch-310", which subsequently won the Red Banner title. In 1944 I became commander of the submarine M-90--a "little fellow" with a crew of 21. I spent the rest of the war on this submarine, celebrating Victory Day at sea. I was then a senior lieutenant. In the postwar years I served for the most part on various classes of submarines in the Baltic Sea: this "little fellow", a medium-size submarine, and a large submarine. In the Pacific Fleet, where I was assigned in 1950, I commanded submarines, the "shchuka" and the "leninets", as we called them.

When I recall the war and postwar years, I always like to express my gratitude to the seamen, petty officers, and officers with whom I had to undergo many hardships during the battles and cruises of the difficult submarine service. If they read these lines, pass on my greetings and hearty thanks for their selfless work.

Later, in the course of my service in the Pacific Ocean, and since 1959, in the Northern Fleet, I had occasion to participate in the process of mastering the operation of powerful missile-carrying and nuclear-powered vessels, which had then begun their initial long cruises on the ocean and in the polar latitudes.

Question: You commanded the Red Banner Northern Fleet. Have you retained any attachment to it? What was the most notable thing that occurred during your period of service in the north?

Answer: That question is a little on the sly side. For the Chief of the Main Naval Staff is not supposed to have favorite and unfavorite fleets. But I believe that the men of the Baltic, Pacific and Black Sea Fleets will take it in the right way and not be offended if I admit that part of my heart has remained with the Red Banner Northern Fleet. Much is bound up with it and no little has been given it in return. During the time I was in command in the north, we actively continued the process of mastering our atomic submarine fleet, taking them under the polar ice. Naval garrisons in the polar region are comfortable and well provided for. The fleet command has devoted much attention to the living conditions of the seamen and their families. We have tried to create good living and recreational conditions.

I often went to sea. The cruises in the polar latitudes, especially during the winter, when the aurora borealis blazes in the night sky with all colors of the rainbow, will never be forgotten. But above all, I will never forget the people--courageous, steadfast and persevering, thoroughly devoted to their work. You used to hear a report from the commander of an atomic submarine which had just returned from an underwater cruise of several months in the world ocean and were filled with a feeling of pride in our seamen. These are people of great military drive and fervor, true men of the sea, true patriots.

Question: Georgiy Mikhaylovich, in November 1974 I had occasion to participate in the cruise of the KSF [Red Banner Northern Fleet] destroyers "Zorkiy" and "Boykiy" when they made their friendship visit to the capital of Norway, Oslo. The detachment sailed under your flag, and you probably remember that we were in the most violent storm the entire passage. I was struck at the time by the extraordinary steadfastness showed by the crew and the outstanding manner in which the seamen, petty officers and officers stood underway watch, in spite of the exhausting unrelieved pitching and rolling and the way the deck would go out from under your feet. In your view, how do seamen acquire such high moral-military qualities?

Answer: Yes, I remember that cruise. And I'll tell you something else: many foreign naval vessels in the North Atlantic then sought harbor from that violent storm at their bases. But the Northern Fleet seamen passed boldly through the center of the cyclone. It did thoroughly wear us out. But I had confidence in the destroyer crews, and at the height of the storm I unhesitatingly ordered them to maintain their course. The seamen demonstrated a high level of training, mastery, and an ability to perform in difficult situations. The Norwegians, incidentally, were amazed that we made it into Oslo with out pilots. The storm had kept even Norwegian vessels from putting out to sea.

Speaking of how seamen acquire the necessary moral-military qualities, I want to put in a good word for the DOSAAF naval schools. Generally speaking, they don't do a bad job of training specialists for the Navy. The young people come to shipboard service with a certain amount of knowledge and skill and moral preparation for the difficulties of naval service. They are therefore rapidly able to perform their duties and pass easily through their period of development and maturing. But the best school for them is that provided by cruises at sea. It is precisely during these periods that they undergo their moral and physical tempering and become strong, skillful and able. Possessing these qualities, a seaman will not falter in battle, but will perform without fear, cool and composed.

Question: Can you tell us about what new has lately been introduced into seamen's and petty officers' service in our navy? How should young men prepare themselves for naval service?

Answer: There is no little new in the navy. A young man who dreams of becoming a sailor must, above all, accept beforehand the fact that he will have to study and work very hard to master his occupation and, of course, to sail. Gone are the times when a week's cruise was considered a big event. Ships of the Soviet Navy now sail for months in different regions of the world ocean. Long periods at sea naturally have some connection with great physical stress, especially in the northern latitudes in stormy weather. For that matter, neither is sailing in the intense heat of the equatorial latitudes such a simple matter. It is precisely on such cruises that seamen undergo a tempering process and become bold and steadfast and outstanding specialists. The DOSAAF naval school have therefore to become centers, not only of specialty, but also of physical training and moral-political and psychological tempering for future seamen. I would advise that special attention be devoted to the last of these.

A fighting ship is a complex structure of power engineering in combination with technical equipment and weapons. Personnel have been provided with all necessary living and training conditions. Our ships are provided with comfortable, air-conditioned accommodations and crew compartments and attractive officers' wardrooms, petty officers' messes and seamen's clubs. Special concern is shown for the needs of submarine crews. Good conditions have been created here for recreation, training, and military work.

We have also to take into account the fact that the navy is continually being improved by new, ever more complex and sophisticated military equipment, including electronic equipment. It is no longer enough to know how one type of weapon or another is put together. It is now necessary to have a view of the physical processes occurring in the many units and assemblies in order to be able instantly to determine the cause of any unexpected malfunction of a piece of equipment and quickly to eliminate the difficulty. There will be no time for hesitation in modern-day naval engagements; one has to learn to move within short periods of time, to bring the development of practical skills on the part of personnel to the point of intelligent automatic performance, and to make skillful use of a ship's systems and electronic equipment.

Forming the basis for all training of young people for naval service must be a high degree of ideological maturity; a strong belief on the part of personnel in their sacred duty to the

cause of the defense of the motherland, their people, and the achievements of the Great October; and devotion to communist ideals. Our seamen display this maturity and tempering under peacetime conditions in the course of long cruises and in the process of accomplishing tasks assigned them by command personnel.

Especially indicative is the high degree of political maturity, discipline, bearing, and culture displayed by our seamen when they visit the many ports in foreign countries. Wherever our sailors go, the common people always relate to them with unvarying delight and gratitude. This is repeatedly mentioned in the press. Limitlessly devoted to the cause of our great motherland and of the CPSU, naval personnel are the great pride and achievement of socialist reality.

Question: Georgiy Mikhaylovich, we want to prepare a report on a leading ship of the Red Banner Northern Fleet and on a typical day for its crew describe its training and duty. Which ship would you suggest we visit?

Answer: There are no few outstanding vessels in the Red Banner Northern Fleet. Visit, let's say, the BPK [large antisubmarine warfare vessel] "Admiral Makarov", and you will see that Soviet seamen are performing their duty with honor.

I would like to say in conclusion that our people may calmly and securely go about their work in fulfillment of the great plans for communist construction. Together with personnel of the other branches of the Armed Forces, Soviet seamen are standing a vigilant guard over the motherland and are always prepared to destroy any aggressor!

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Training Aboard ASW Ship

Moscow VOYENNNYYE ZNANIYA in Russian No 7, Jul 78 signed to press 7 Jun 78

[Text] Taking the advice of Admiral of the Fleet G. M. Yegorov, Chief of the Main Naval Staff, our correspondent paid a call on the outstanding large ASW ship of the Red Banner Northern Fleet, the "Admiral Makarov", the crew of which has achieved high ratings in socialist competition.

This is a report from on board the ship about a typical day of a leading crew.

AT THE SOUND OF REVEILLE.... The hand of the 24-hour ship's clock in the deckhouse of the officer of the deck was coming up on 6.

"Bugler, sound reveille!"

Slowly now, the bugle began to sound out. Its tones, amplified by the loudspeakers of the ship's on-board communications system, carried to all crew spaces. Their blue wool blankets immediately flew off. As if ejected by invisible springs, the seamen sprang from their bunks onto the steel deck painted with dark brown red-lead paint.

From the time of reveille began the strict time accounting of the large ASW ship's daily routine.

• "Begin morning PT!"

• Like cornflowers in a field appeared the striped jerseys on the quarterdeck, foredeck and superstructures. It's a pleasant feeling, there in the fresh sea breeze to shake off the last bit of sleepiness with vigorous movements, to invigorate and prime oneself with a good attitude.

Together with the all the others during the morning PT was the young seaman Yuriy Kozlov. He has not been on the ship very long. But he does feel like a newcomer. The training he has received in the DOSAAF naval school is having its effect. Yuriy has quickly mastered the performance of his duties. The only thing is, he is still not completely used to getting up so fast early in the morning. Chilled, the young man huddles up against the biting wind smelling of snow and thinks: "If only Mama could see me now. She would be horrified. 'Why, you'll catch cold and get sick,' she'd say." But I, who have now served no little time in the Navy, would like to say to his mother, "Don't worry, Nina Grigor'yevna. Nothing is going to happen to your son. He'll come back home to you well-conditioned, mature, strong and skilled. We don't doubt but what your heart will be filled with gratitude to the Navy and pride in your son."

The PT is over. Reddened, joking, the seamen move off to wash up to the tune of traditional navy "egging."

• After breakfast is the hoisting of the flag. This ritual is performed with ceremony. For the naval flag, a symbol of military honor, valor, and glory, serves as a reminder to each seaman of his sacred duty to render devoted service to the Soviet motherland and to defend it courageously and skillfully, sparing neither his blood nor his very life.

At the call "Fall in at quarters!" the entire crew falls in on the upper deck. Five minutes before the hoisting of the flag the ship's CO, Captain 2d Rank G. Vlasov, appeared on the quarterdeck. After receiving the report of the executive officer, he greeted the crew.

The loud voice of the watch officer sounds out: "To the flag and jack! Attention!"

The formation of seamen stands motionless. All gazes are turned toward the ensign staff.

"Hoist the colors!"

To the solemn accompaniment of the bugle rises the light blue strip of silk with the red star, sickle and hammer. At the same time, the jack is being raised on the forward staff, a red flag with a star in the center signifying that the ASW ship "Admiral Makarov" is a ship of the first rank.

The seamen stand in formation a little while longer. Subunit officers disseminate the day's tasks among their subordinates and inspect personnel.

A typical duty day has begun, a day of intense military activity.

Satisfying himself that everything on the ship was proceeding in order, the commander went up to his cabin. He sat down at his desk and pulled over a portfolio of papers. He went through them attentively. There were staff papers ordering one military training measure or another or calling for various administrative reports, reports from subordinates, and letters from the home areas of the seamen. In spite of his enormous workload, Gennadiy Ivanovich carries on a voluminous correspondence with the parents of his subordinates.

"We have a common cause," he said, "and that is to develop each seaman into a highly conscious, effective defender of the motherland."

When Captain 2d Rank Vlasov is sitting at his desk, he bears little resemblance to the commander of a fighting ship. He looks rather more like the head of a large institution. He has to decide a mass of purely administrative questions. For a large ASW ship is a large, complex unit; on it serve hundreds of people, and each day arise dozens of large and small problems, the resolution of which brooks no delay. But Gennadiy Ivanovich handles them successfully. He was born deep in the interior, in Kustanayskaya Oblast. So it is impossible to say that he had dreamed of becoming a sailor since childhood.

"It was all quite simple," the commander told us. "I completed secondary school and, what was a surprising development to me myself, I went to Leningrad and enrolled in the Naval School imeni M. V. Frunze. During our very first practice exercise I really fell in love with the sea. And to this day I have maintained my loyalty to it, although all sorts of things have happened during that time...."

Yes, no few grim experiences have fallen the lot of the commander of the "Admiral Makarov" during his years of naval service. He has been battered by the violent storms of the Atlantic, mercilessly burnt to a crisp by the tropical sun, and chilled by the polar snowstorms during ice cruises. But one thing has remained unchanged--his love for the Navy and his ship and his devotion to his duty. This the communist Vlasov proves by his actions. It is no simple matter to bring a ship up into the ranks of the outstanding and to maintain a solid hold on such a high position over the course of several years. This is, of course, a result of the efforts of the entire crew and the party and Komsomol organizations. But we should not forget that acting as the organizer of any activity on board the ship is the commander above all.

The question may occur to readers, is it easy to be the commander of a modern-day fighting ship? Let Gennadiy Ivanovich answer this question.

"The fact is," he says, "that if you devote yourself to your duty with all your heart and soul, if you give yourself over entirely to your military work and don't stand still, the service and all the daily drudgery of command responsibilities do afford great satisfaction, and things move along as they should. Generally speaking, though, the commander's duties necessarily involve difficulties. One has frequently to deny oneself things which are, in many respects, purely personal. Here, for example, we had already been at our base for two days, but I had not yet been able to get home...."

Gennadiy Ivanovich gazed affectionately at the photographs of his wife and daughters hanging on the cabin bulkhead.

"When you're at sea during a long cruise," continued the captain 2d rank, "and you come to your cabin after several on the bridge and see photographs dear to your heart, you feel as though you had never been tired and your spirits lift. For in order for our friends and relatives, all Soviet people, to be able to live in peace and carry on with their peaceful socialist labor, we maintain our difficult watch at sea.

Let's leave the commander in his cabin to tend to his work and continue on through the ship.

MILITARY EQUIPMENT IN TRUSTWORTHY HANDS. Each morning on board the ship is held a weapons and equipment inspection and check. On signal the men take up their duty stations and set to work.

Let's drop into the sonar operators' compartment. This choice did not fall on them by accident. At sea the day before, they were especially outstanding. Here is how it happened.

The ship was completing a routine training cruise. It was carrying on a search for a submarine. Nobody on the ship knew in which grid square on the sea chart it was located. The commander therefore had above all to solve a logic problem: after correlating a large amount of different kinds of data, he had to determine where the underwater "enemy" was most likely to be. Coming to the commander's aid in the solution of this problem were "thinking" electronic instruments.

Within minutes the solution had been worked out:

"Navigator, course 230!," ordered the captain 2d rank. "Calculate for maneuvering."

The head of the navigation department, Senior Lieutenant D. Sabaneyev, bent down over his chart and set quickly to work with protractor and parallel ruler. A minute later he reported his calculations to the ship's commander.

Its sharp stem cutting through the lead-colored waves, the "Admiral Makarov" made for the designated area. Above the deck astern rose the foamy back waves churned up. The great steel mass of the large ASW ship moved over the empty ocean at high speed. Things now depended on the sonar operators. They bent down over their instruments, their keen hearing alert to the sounds from the depths as they probed them with the sound pulses from the sonar. Standing watch were the leading specialists Senior Seaman S. Ivanov and Seaman O. Tolbatskiy.

The commander sat at his position in the conning tower. Taking the microphone, he began his communication; clearly pronouncing each word, he said:

"Attention crew. The ship has begun its submarine search. From the entire crew I ask for the utmost attention and readiness. This is the commander."

The captain 2d rank glanced at the instruments. According to his calculations, the submarine should be somewhere in this area.

"Sonarman, listen more closely!"

"Aye-aye, listen more closely!"

Then literally at that very instant came the report:

"Bearing.... Range.... I hear the sound of submarine propellers."

"Maintain contact!"

"Aye-aye, maintain contact!"

And so began the one-on-one duel between the "Admiral Makarov" and the fast-moving nuclear submarine. The task of the crew of the ASW ship was not to let their quarry escape; they had to "press" it and know at all times its course, speed, and depth. For their part, the submarine crew tried to break away from their pursuers and mislead the "enemy" on the surface. For this purpose they executed a complex maneuver which complicated the work of the ASW ship's sonarmen. Descending to a greater depth, the submarine dashed at high speed about the large nautical grid square. But all the submariners' efforts were in vain. The sonarmen tenaciously maintained their hold on their target, constantly reporting the parameters of its movement to the main command station. Several hours passed in this manner. The crew of the "Admiral Makarov" proved itself worthy of its high position as an "outstanding" ship. This was a success for everyone concerned. But the commander especially warmly expressed his gratitude to the sonarmen. Their model performance was mentioned in a ship's order.

This success did not turn the heads of these "wizards," as sonarmen are known to the crew of the "Admiral Makarov." In spite of the fact that they are all outstanding specialists and masters of their craft, each one of them studies persistently. They, as well as the other specialists aboard this large ASW ship, have a rule: "Equipment must be in reliable hands." The seamen carefully inspect every unit of equipment, every part, making sure that it is reliable and in good working order.

EXACTINGNESS. This is the perfect word to characterize the exercises planned for each specialty, which are held on the ship on certain days following the inspection and checking of weapons and equipment.

Assembled for an exercise at the PDU, the ship's remote power plant control station, are subordinates of Chief Petty Officer G. Alekbarov.

"He's one of our best petty officers. He has a good command of methods and procedures," said Captain 3d Rank Yevgeniy Vasil'yevich Puzyrnyy, the ship's deputy commander for political affairs, about him.

The watch in the PDU during a cruise is especially important. On the training and attentiveness of the seamen depend the operation of the ship and the trouble-free functioning of its many

pieces of mechanical equipment. This is why everyone is so greatly demanding in his attitude toward these specialty training exercises.

The petty officer first of all attentively checked for regulation uniform and appearance. He ordered one sailor to comb his hair and another to adjust his collar to its proper position.

"Appearance is no unimportant matter," Alekbarov then told us. "One can judge by it to some extent the attitude with which a seaman comes to the training exercise. Also to be considered is the fact that a conscious practice of adhering in all respects to regulation requirements is developed in personnel by all aspects of shipboard life."

At precisely the designated time, the petty officer arrived for the training exercise. After announcing the subject, he set about his clear and interesting presentation of the material. The seamen listened attentively. The leader then began to ask questions. More often than to others the petty officer turned to Seaman V. Tatar and Senior Seaman N. Fatykhov. He had a variety of reasons for doing this. Seaman Tatar has served on the ship for a comparatively short time, and he is still a specialist 3d class. To become a specialist 2d class constitutes the main point of his socialist obligations for the summer training period. Alekbarov remembers this. With the seaman's duties in mind, he continually tests his knowledge and operational skills during these training exercises and stimulates him through various situation problems to approach his training in a creative manner, to think, and remember, and to display drive and initiative.

Things were different in the case of Senior Seaman Fatykhov. In spite of the fact that he is already a high-ranking specialist, he still has a good chance to achieve higher rank. That's why the petty officer "harasses" him during these training exercises and tries to shake him out of his complacency and arouse his interest in expanding his technical horizons.

After "probing" his listeners with test questions and convincing himself that they had mastered the theory well, the petty officer ordered his subordinates to come up to the control panel. Once again he explained and demonstrated everything on the equipment, dwelling on the possible malfunctions of one mechanism or another.

As called for by procedure, Chief Petty Officer Alekbarov left time for summing up results. He concluded that the level of knowledge possessed by the listeners in his group could, on the whole, be evaluated as good. The seamen began to smile. As it

turns out, they had not put out their efforts in vain. They had been able to achieve a new level in the process of improving their military skills.

ALL AT THEIR STATIONS. The day aboard the "Admiral Makarov" proceeded in its routine manner. Each seaman performed his duty at his assigned station. In the galley, the ship's chief cook, Petty Officer 1st Class I. Fayzulayev, practiced his craft, "conjuring" over some enormous kettles.

"Come on, come on!" he would call out, hurrying on his assistants. "It's time for dinner and we haven't finished frying the chops and the compote isn't cool...."

In the sparkling galley all was a model of cleanliness. The cooks' white jackets were spotless. Powerful ventilator fans blow fresh air into the area. Passing seamen enjoy sniffing the savory smells. They make a stop by the daily menu put up here.

"Well, what are we having for dinner?" inquired a strong-looking red-cheeked fellow who read aloud:

"For a side-dish, vegetable and pickled herring salad. Soup for the first course, garnished chops for the second, and compote for the third. Just like in a restaurant...."

Seamen on the boatswain's crew were at work on the upper deck. Some were touching up the structures, while others checked the rigging, the load-lifting equipment and the operation of the capstans.

On the bridge, the signalmen were at work checking their multi-colored flags and cleaning the optics.

Up to the ladder came a covered truck.

"Officer of the provisions loading section," sounded out over the loudspeakers.

Good-naturedly, with light-hearted exchanges among themselves, seamen lugged the heavy beef carcasses, canned goods, and sacks. The work got done, and a few minutes later the pleased fleet rear services supply agent thanked the seamen:

"Thanks men. You've saved me some time. Now I'll be able to make an extra run to the berths today. Ships have come in from sea, and I have to supply them with fresh provisions...."

The Lenin room smells of glue and paint. New stands are being set up. There are no few truly skilled people aboard the "Admiral Makarov": cabinetmakers, artists, carpenters. Many of the seamen

work in metal relief, and on board this large ASW ship one can see beautifully done pieces in metal depicting the life and work of the crew and dedicated to the heroism of Soviet seamen.

Several hours have passed unnoticed. It's time for dinner. After that the crew will have some time to rest. But then the seamen will report again to their stations for more specialty training exercises, which will last until supper.

THIS OCCUPATION TO SERVE THE MOTHERLAND. LEADERS IN GOOD PERFORMANCE. The evening hours on board the "Admiral Makarov" are used for mas cultural work. Not the last word in this area rests with the Komsomol members.

Lieutenant S. Drobakh heads the Komsomol committee. You will rarely find him in his quarters. He is out among the seamen all day. Sergey only quite recently completed work in the Kiev Navy Political School; he already has a good knowledge of the ship, is sufficiently competent in many areas and is used to being at sea. He is respected for this and is recognized as a Komsomol leader.

"The main responsibility of the Komsomol aktiv," Lieutenant Drobakh told us, "is to mobilize these young people for successful accomplishment of their military and political training tasks."

And the Komsomol aktiv in fact doesn't do a bad job of this. Most of the seamen and petty officers among the Komsomol membership hold "outstanding" honors and class ratings in their specialties. In this respect they comprise the crew's hard core and providing the commander a solid point of support when it comes to the crew's accomplishment of assigned tasks.

The only ones who have a hard time on the "Admiral Makarov" are those who allow themselves to depart from regulation requirements, who violate discipline, or who are negligent or careless in their training or duty performance. The entire crew "puts the pressure" on these people. They are summoned to the Komsomol bureau and heard at Komsomol meetings.

But offenders fear most of all the ship's information leaflets. They are put out on the ship to cover the hot trail of events. The actual impact of this "small-time press" is a very great one.

Seaman K. Ditetkov began to show signs of losing his enthusiasm for the training exercises. This did not escape the attention of the aktiv. The information leaflet of the subunit (podrazdeleniye) in which Ditetkov serves criticized the seaman several times in a sharp but friendly manner, and it certainly made an impact on the young man. He came to the secretary of the Komsomol committee and said, "I will do well in my studies, only let them stop 'dressing me down' in the information leaflet. I am ashamed before my comrades."

Ditetkov kept his word, and the very day we visited the ship he received an "outstanding" rating in his final political training exercises. An hour after the training was over the sailor read with delight the favorable mention he received in the information leaflet that had just come out.

It is hard to overestimate the role played by the Komsomol members in the organization of socialist competition. Colorful display stands have been set up in all subunits, and the results achieved by each man are posted every day. Around these stands one hears lively discussions of affairs on board the ship, comparisons of the performance results of individual seamen and crews, and plans for new and greater obligations.

ALWAYS ON BATTLE WATCH. The day passed quickly. It was a routine day like most of the others in the year. The duty and watch, all the various shipboard operations, the specialty exercises and the training, all were conducted with efficiency. The seamen did what they did yesterday or a week or a month ago: they increased their mastery of their occupational skills, accumulated experience, and improved their operational skills. But in their performance of their military duties there was no sign of weary routine. The men of the "Admiral Makarov" worked and studied with the enthusiasm of people who love their work and who are deeply aware of their responsibility for the security of their beloved motherland.

At 2200 the signal sounded to stand down. It became still in the crew's quarters. The upper deck became deserted. Only watch personnel remained. The crew was asleep. It seemed that the ship itself, exhausted after the day's operations, had leaned its side over against its berth and dozed off, recalling its own violent clashes with the ocean, from which it invariably emerged victorious. And not only because it was powerful, strong and stable in its struggle with the elements. Also victorious were the Soviet seamen, developed by the Communist Party in the spirit of selfless devotion to the motherland, stout of heart, bold and courageous. They are always on battle watch, prepared at any moment to carry their performance of their duty to its conclusion.

The crystal-like tones of the bells sound out in the clear night air. A new day will soon be here and the ship will greet it at sea, where it is headed at daybreak. It will not soon return to its base. Its battle station is far out at sea! We wish you a good cruise, "Admiral Makarov!"

PHOTO CAPTIONS

1. p 4. The working day of the ship's commander, Captain 2d Rank G. Vlasov, begins with his review of official paperwork.
2. p 5. Specialists of the subunit led by Lieutenant-Engineer O. Nesterov perform their duties well. In the photo: Chief Petty Officer G. Alekbarov, Petty Officer 2d Class G. Gorbenko, Lieutenant-Engineer O. Nesterov, Seaman V. Tatar, and Senior Seaman N. Fatykhov stand watch in the ship's remote power plant control station.
3. p 6. Skillfully locating a target in the ocean depths and directing the ship toward it are the outstanding sonar operators Senior Seaman S. Ivanov (foreground) and Seaman O. Tolbatskiy.
4. p 7. The ship's deputy commander for political affairs, Captain 3d Rank Ye. Puzyrnyy, instructs the ship's Komsomol aktiv. From left to right: Petty Officer 2d Class R. Zhamilov, Lieutenant S. Drobakh, Petty Officer 1st Class N. Strazhnikov, Captain 3d Rank Ye. Puzyrnyy, Warrant Officer N. Petrenko, and Lieutenant A. Pugachev.

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